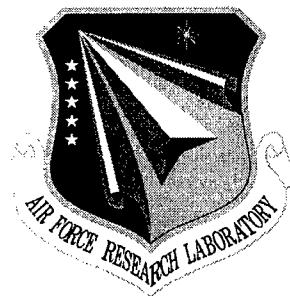


**AFRL-IF-RS-TR-2001-108**  
**Final Technical Report**  
**June 2001**



# **ADVANCED TRAFFIC MANAGEMENT SYSTEMS (ATMS) RESEARCH ANALYSIS DATABASE SYSTEM**

**ITT Industries, Inc.**

**Brad Mears**

*APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED.*

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ROME, NEW YORK**

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## **Introduction**

### ***General***

This document was developed by ITT Industries, Inc., Systems Division (ITT) under contract to the Federal Highway Administration (FHWA), as part of a multi-year software development effort. The FHWA Advanced Traffic Management Systems (ATMS) R&D group is funding ITT to maintain and re-engineer an existing traffic simulator (CORSIM) and to develop complementary software tools.

With input from the Traffic Software Developers Task Force (TSDTF), an ITE steering group, ITT and FHWA developed Version 1.0 of the Traffic Software Data Dictionary (TSDD) and Traffic Software Object Model (TSOM) for the Traffic Analysis Problem Domain as a means of integrating disparate traffic engineering software tools. Since these tools include research and analysis tools as well as planning models, the data source is the entire traffic engineering problem domain. Version 1.0, while not comprehensive, is the first step in establishing a common data dictionary for these tools.

### ***Standards***

A working group of the Institute of Electrical and Electronics Engineers (IEEE) is developing a Standard for Data Dictionaries for Intelligent Transportation Systems. The draft standard is designated "IEEE P1489". The goal of P1489 is to facilitate the interchange of data between ITS subsystems such as Traffic Management Centers, transit systems, emergency management systems, and others. The ARADS data dictionary is documented in accordance with a draft of P1489. The ARADS object model is diagramed using UML notation.

Another group, the TMDD a committee of the Institute of Transportation Engineers (ITE), is developing a Traffic Management Data Dictionary (TMDD) in accordance with IEEE P1489. Many of the data elements which will be published in the TMDD are also applicable to the problem domain of the TSDD. Common terms have been identified and notated in the TSDD definitions.

### ***Audience***

Intended for traffic simulation software designers and developers, this document will provide a common set of terms and definitions from which to develop databases and to exchange data between traffic applications.

### ***Contents***

This document contains Version 1.0 of a Traffic Software Data Dictionary (TSDD) and its accompanying Traffic Software Object Model (TSOM). The TSDD consists of traffic terms and definitions in the same format that is used in the Traffic Management Data Dictionary (TMDD). The TSOM contains Unified Modeling Language (UML) object

model diagrams that describe object classes, their attributes and their relationships in the traffic simulation domain.

# **Traffic Software Data Dictionary**

**Version 1.0**

## ***Format***

The TSDD is formatted to match the TMDD format. In as much as the data format of each item is implementation specific, some of the fields are blank. The terms are sorted alphabetically by the "Descriptive Name" and the formats for the name are:

CLASSNAME\_AttributeName\_datatype or  
"MOE"\_ClassName\_AttributeName\_datatype or  
"CLASSNAME"

Definition sources are listed in the bibliography.

## ***Data Sources***

The terms and definitions in the TSDD were collected from traffic engineering documents which are listed in the bibliography. However, most came from the Highway Capacity Manual, FHWA documents and CORSIM manuals. Often terms had multiple meanings and the source documents would disagree. A priority was given to each document and the definition taken from the document of highest priority. Any definition listed without a source is original and implied from the source documents. In future versions multiple definitions for the same term will have to be included.



## Data Definitions

---

<b>Classification Scheme Name:</b>	IEEE P1489 Annex B
<b>Classification Scheme Version:</b>	19971009, V0.07
<b>Submitter Organization Name:</b>	ITT Industries, System Division
<b>Last Change Date:</b>	19990930

---

<b>Descriptive Name:</b>	ACTUATEDCONTROLLER
<b>Descriptive Name Context:</b>	Traffic Simulation
<b>Definition:</b>	A controller whose phase changes can be triggered by traffic sensor data.
<b>Definition Source:</b>	
<b>Class Name:</b>	ActuatedController
<b>Keywords:</b>	
<b>Related Data Concept:</b>	
<b>Relationship Type:</b>	
<b>ASN1 Name:</b>	
<b>ASN1 Data Type:</b>	
<b>Representation Class Term:</b>	
<b>Value Domain:</b>	
<b>Valid Value Range:</b>	
<b>Valid Value List:</b>	
<b>Valid Value Rule:</b>	
<b>Internal Representation Layout:</b>	
<b>Internal Layout Maximum Size:</b>	
<b>Internal Layout Minimum Size:</b>	
<b>Remarks:</b>	Last Change 082799

---

<b>Descriptive Name:</b>	ACTUATEDCONTROLLER_MaximumExtension_quantity
<b>Descriptive Name Context:</b>	Traffic Simulation
<b>Definition:</b>	For a fully actuated controller, the length of time that a phase may be held in green in the presence of an opposing serviceable call. The maximum extension is the maximum duration of "service green" (i.e., the duration of green beyond the end of the minimum green or variable initial interval, whichever is greater).
<b>Definition Source:</b>	FHWA Control Systems Glossary
<b>Class Name:</b>	ActuatedController
<b>Keywords:</b>	
<b>Related Data Concept:</b>	
<b>Relationship Type:</b>	
<b>ASN1 Name:</b>	
<b>ASN1 Data Type:</b>	float
<b>Representation Class Term:</b>	
<b>Value Domain:</b>	
<b>Valid Value Range:</b>	
<b>Valid Value List:</b>	
<b>Valid Value Rule:</b>	
<b>Internal Representation Layout:</b>	
<b>Internal Layout Maximum Size:</b>	
<b>Internal Layout Minimum Size:</b>	
<b>Remarks:</b>	Last Change 082799

---

<b>Descriptive Name:</b>	ACTUATEDCONTROLLER_MaximumGap_quantity
<b>Descriptive Name Context:</b>	Traffic Simulation
<b>Definition:</b>	This is the value from which gap reduction is initiated when an opposing call occurs. This value will be equal to or greater than the vehicle extension time; it

determines the time before gap reduction.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** ActuatedController  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** ACTUATEDCONTROLLER\_MaximumGreen\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** In actuated controllers, the longest time for which a green indication will be displayed in the presence of a call on an opposing phase.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** ActuatedController  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** ACTUATEDCONTROLLER\_Node\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The node number of the intersection controlled.  
**Definition Source:**  
**Class Name:** ActuatedController  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** ACTUATEDCONTROLLER\_Type\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The controller type, e.g. 170, 2070, etc.  
**Definition Source:**  
**Class Name:** ActuratedController  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=NEMA, 1=....  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** APPROACH  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The region of an intersection through which cars approaching the intersection from a single Segment enter the intersection.  
**Definition Source:**  
**Class Name:** Approach  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** APPROACH\_AmberIntervalResponse\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The response of drivers to the onset of the amber indication expressed in terms of an acceptable deceleration (fpss). This value is obtained from a default table the correlates with a driver characteristics value.  
**Definition Source:** CORSIM Record 144  
**Class Name:** Approach  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**

Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: APPROACH\_Azimuth\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The angle of this intersection approach relative to due north.  
Definition Source: CORSIM Record 80  
Class Name: Approach  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: APPROACH\_UpstreamNode\_number  
Descriptive Name Context: Traffic Simulation  
Definition: The upstream node number of this approach to an intersection.  
Definition Source:  
Class Name: Approach  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: integer  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799Multiple instantiations

---

Descriptive Name: ARTERIAL  
Descriptive Name Context: Traffic Simulation  
Definition: Signalized streets that serve primarily through traffic and provide access to abutting properties as a secondary function, having signal spacings of 2 mi or less and turn movements at intersections that usually do not exceed 20 percent of total traffic.  
Definition Source: HCM A-1  
Class Name: Arterial  
Keywords:  
Related Data Concept:

Relationship Type:  
ASN1 Name:  
ASN1 Data Type:  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: ARTERIAL&SYSTEMCOORDINATIONHARDWARE  
Descriptive Name Context: Traffic Simulation  
Definition: Any hardware used to coordinate traffic on arterials or within a traffic system.  
Definition Source: Traffic Engineering, McShane, et al  
Class Name: Arterial  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type:  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: BICYCLE  
Descriptive Name Context: Traffic Simulation  
Definition: A vehicle having two tandem wheels propelled solely by human power, upon which any person or person may ride.  
Definition Source: HCM 14-1  
Class Name: Bicycle  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type:  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: BICYCLELANE  
Descriptive Name Context: Traffic Simulation  
Definition: A portion of a road which has been designated by striping, signing, and

pavement markings for the preferential or exclusive use of bicyclists.  
**Definition Source:** HCM 14-3  
**Class Name:** BicycleLane  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** BUS  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A heavy vehicle involved in the transport of passengers on a for-hire, charter, or franchised transit basis.  
**Definition Source:** HCM A-1  
**Class Name:** Bus  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** CURVE  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** An arbitrarily shaped line in two dimensions. The curve must have continuity at all points. In other words, it must be one connected piece, but it can have sharp corners (or not) anywhere.  
**Definition Source:**  
**Class Name:** Curve  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**

**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** CURVE\_EndPoint\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The distance on the link from the upstream end to the end of the curve.  
**Definition Source:** TWOPAS  
**Class Name:** Curve  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** CURVE\_Radius\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The radius of the curve.  
**Definition Source:** TWOPAS  
**Class Name:** Curve  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** CURVE\_StartPoint\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The distance on the link from the upstream end to the beginning of the curve.  
**Definition Source:** TWOPAS  
**Class Name:** Curve  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**

**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** DEPARTURE  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The region of an intersection through which vehicles leave the intersection.  
**Definition Source:**  
**Class Name:** Departure  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** DEPARTURE\_DownStreamNode\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The downstream node number of the departure link.  
**Definition Source:**  
**Class Name:** Departure  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** DETECTOR  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A device for indicating the presence or passage of vehicles or pedestrians. This general term is usually supplemented with a modifier, i.e., loop detector, magnetic detector indicating type.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** Detector  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**



**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** DETECTOR\_Approach\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The approach this detector is in.  
**Definition Source:**  
**Class Name:** Detector  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** DETECTOR\_CarryOverTime\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The amount of time to continue input to the phase after the vehicle has left the detection area.  
**Definition Source:** CORSIM Manual 5-74  
**Class Name:** Detector  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** DETECTOR\_DelayTime\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The input delay time to a phase while the phase is in red.  
**Definition Source:** CORSIM Manual 5-74  
**Class Name:** Detector

**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** DETECTOR\_DistanceToStopLine\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The distance between the trailing edge of the detector sensing zone and the stop line.  
**Definition Source:** CORSIM  
**Class Name:** Detector  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** DETECTOR\_Length\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The length of the detecting zone from leading edge of the sensing zone to the trailing edge of the sensing zone.  
**Definition Source:** CORSIM  
**Class Name:** Detector  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** DETECTOR\_Mode\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The detector mode.  
**Definition Source:** CORSIM  
**Class Name:** Detector  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=analog, 1=digital  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** DETECTOR\_Type\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A code designating the type of detector. See DETECTOR\_Type\_code in TMDD.  
**Definition Source:** CORSIM and others  
**Class Name:** Detector  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Inductive Loop, 1=Magnetometer, 2=Ultrasonic, 3=Microwave, 4=Active Infrared, 5=Passive Infrared, 6=Video Image, 7=Passive Magnetic, 8=Passive Acoustic, 9=Acoustic Array, 10=Infrared Laser, 11=Doppler Radar  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** DISPLAY  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Any device or group of devices for displaying the rules for moving or for controlling the movement of vehicles on a roadway.  
**Definition Source:**  
**Class Name:** Display  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**

**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** DRIVER  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A person or other intelligent agent operating a vehicle.  
**Definition Source:**  
**Class Name:** Driver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** DRIVER\_Aggressiveness\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A measure of a driver's aggressiveness in regard to maneuvering.  
**Definition Source:** Traffic Engineering, McShane, et al  
**Class Name:** Driver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** DRIVER\_CarFollowingFactor\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This value is a sensitivity factor in tenths of a second to indicate the headway this driver will allow between his car and the car he is following.  
**Definition Source:** CORSIM Record 68  
**Class Name:** Driver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**

**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** DRIVER\_Familiarity\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This is the number of next turn movements that the driver is familiar with.  
**Definition Source:** CORSIM Record 153  
**Class Name:** Driver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** DRIVER\_Type\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This value identifies the driver type and is used to correlate driver type parameters.  
**Definition Source:** CORSIM Record 68  
**Class Name:** Driver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:** 1-11  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** EMISSION\_AccelerationDeceleration\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This value correlates to the Vehicle Performance Index for the specified speed and will be applied to the emission rate.  
**Definition Source:** CORSIM Record 172

**Class Name:** Emission  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** EMISSION\_Rate\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The emission rate for the specified type at the specified speed.  
**Definition Source:** CORSIM Record 172  
**Class Name:** Emission  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** EMISSION\_Type\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This code specifies which table data is used.  
**Definition Source:** CORSIM Record 172  
**Class Name:** Emission  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Fuel consumption rate, 1=HC emission rate, 2=CO emission rate, 3=NOx emission rate.  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** EMISSION\_VehiclePerformanceIndex\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This is the Vehicle Performance Index specified in the Vehicle object.  
**Definition Source:** CORSIM Record 172  
**Class Name:** Emission  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799See the Vehicle Class VEHICLE\_PerformanceIndex\_code.

---

**Descriptive Name:** EMISSION\_VehiclePerformanceIndex\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This is the Vehicle Performance Index specified in the Vehicle object.  
**Definition Source:** CORSIM Record 172  
**Class Name:** Emission  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799See the Vehicle Class VEHICLE\_PerformanceIndex\_code.

---

**Descriptive Name:** EMISSION\_VehicleSpeed\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The vehicle speed applicable for the specified vehicle performance index.  
**Definition Source:** CORSIM Record 172  
**Class Name:** Emission  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**

**Remarks:** Last Change 082799

---

**Descriptive Name:** EVENT  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Any occurrence which causes a reduction in capacity or abnormal increase in demand on a road.  
**Definition Source:**  
**Class Name:** Event  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** EVENT\_Duration\_time  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See EVENT\_Description\_text in TMDD  
**Definition Source:** CORSIM  
**Class Name:** Event  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:** SSSS.ssss  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** EVENT\_Duration\_time  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See EVENT\_Description\_text in TMDD  
**Definition Source:** CORSIM  
**Class Name:** Event  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**



**Valid Value Rule:**  
**Internal Representation Layout:** SSSS.ssss  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** EVENT\_Length\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The length of the roadway affected by the event.  
**Definition Source:** CORSIM  
**Class Name:** Event  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** EVENT\_MeanDuration\_time  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The mean duration of short-term events.  
**Definition Source:** CORSIM Record 54  
**Class Name:** Event  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** EVENT\_MeanFrequency\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The mean frequency of short-term events. Specified as events per hour.  
**Definition Source:** CORSIM Record 54  
**Class Name:** Event  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**

Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: EVENT\_RubberneckFactor\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The reduction in capacity for the affected lanes at the point of the event.  
Definition Source: CORSIM  
Class Name: Event  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: EVENT\_StartTime\_time  
Descriptive Name Context: Traffic Simulation  
Definition: The time of onset for the event. See EVENT\_TimelineStart\_date in TMDD.  
Definition Source: CORSIM  
Class Name: event  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type:  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout: SSSS.ssss  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: EVENTENVIRONMENTAL  
Descriptive Name Context: Traffic Simulation  
Definition: An environmental occurrence which causes a reduction in capacity or abnormal increase in demand on a road  
Definition Source:  
Class Name: EventEnvironmental  
Keywords:  
Related Data Concept:

**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** EVENTINCIDENT  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** An (unplanned/unanticipated) occurrence in the traffic stream which causes a reduction in capacity or abnormal increase in demand.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** Incident  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** EVENTINCIDENT\_Blockage\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This code specifies where the blockage occurs. See EVENT\_LanesBlockedOrClosed\_code and EVENT\_LanesShouldersBlocked\_code in TMDD.  
**Definition Source:** CORSIM Record 55  
**Class Name:** EventIncident  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=surface street, 1=intersection, 2=freeway segment, 3=freeway on ramp, 4=freeway off ramp, 5=other  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** EVENTINCIDENT\_DownstreamNode\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The downstream node number for the link on which the incident occurred.  
**Definition Source:** CORSIM  
**Class Name:** EventIncident  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** EVENTINCIDENT\_Location\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The location of the upstream end of the incident from the upstream node. See  
EVENT\_LocationCoordinatesAltitude\_location,  
EVENT\_LocationCoordinatesLatitude\_location and  
EVENT\_LocationCoordinatesLongitude\_location in TMDD  
**Definition Source:** CORSIM  
**Class Name:** EventIncident  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** EVENTINCIDENT\_UpstreamNode\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The upstream node number for the link on which the incident occurred.  
**Definition Source:** CORSIM  
**Class Name:** EventIncident  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**

Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: EVENTINCIDENT\_WarningSignLocation\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The distance from the upstream node for the location of the upstream warning sign for blockage incidents.  
Definition Source: CORSIM  
Class Name: EventIncident  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: integer  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: EVENTPLANNED  
Descriptive Name Context: Traffic Simulation  
Definition: A planned occurrence which causes a reduction in capacity or abnormal increase in demand on a road  
Definition Source:  
Class Name: EventPlanned  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type:  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: FIXEDTIMECONTROLLER  
Descriptive Name Context: Traffic Simulation  
Definition: Controller that operate on predetermined, fixed intervals and phase timings.  
Definition Source: FHWA Control System Handbook, 7.6  
Class Name: FixedTimeController  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type:

**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FIXEDTIMECONTROLLER\_Node\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The node number of the intersection that is controlled.  
**Definition Source:** CORSIM  
**Class Name:** FixedTimeController  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAY\_Capacity\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The maximum sustained (15-min) rate of flow at which traffic can pass a point or uniform segment of freeway under prevailing roadway and traffic conditions. Capacity is defined for a single direction of flow, and is expressed in vehicle per hour (vph).  
**Definition Source:** HCM 3-3  
**Class Name:** Freeway  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAY\_Density\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The number of vehicles occupying a given length of lane or roadway averaged over time, usually expressed as vehicles per mile or vehicles per mile per lane.

**Definition Source:** HCM A-2  
**Class Name:** Freeway  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAY\_LevelOfService\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.  
**Definition Source:** HCM A-3  
**Class Name:** Freeway  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:** A - F  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAY\_MaximumServiceFlowRate\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The highest 15-min rate of flow that can be accommodated on a highway facility under ideal conditions while maintaining the operating characteristics for a stated level of service, expressed as passenger cars per hour per lane.  
**Definition Source:** HCM A-3  
**Class Name:** Freeway  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**

**Internal Layout Minimum Size:**

**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAY\_Speed\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A rate of motion, in distance per unit of time.  
 $S = d / t$  (mph or fps).  
**Definition Source:** Traffic Engineering, McShane, et al  
**Class Name:** Freeway  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAY\_Volume\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The number of persons or vehicles passing a point on a freeway during some time interval, often taken to be 1 hr, expressed in vehicles.  
**Definition Source:** HCM A-5  
**Class Name:** Freeway  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYRAMP  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A short segment of roadway serving as a connection between two traffic facilities; usually services flow in one direction only.  
**Definition Source:** HCM A-4  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**



**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYRAMP\_DivergeVolume\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The total volume in the traffic stream which will separate. For the case of a one-lane, right-side on-ramp, the diverge volume is equal to the lane 1 volume immediately upstream of the subject ramp.  
**Definition Source:** HCM 5-3  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYRAMP\_DownstreamFreewaySegmentID\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A unique number identifying the downstream freeway segment.  
**Definition Source:** CORSIM  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYRAMP\_FlowRate\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Vehicles per hour per lane.  
**Definition Source:** Ramp Metering Glossary  
**Class Name:** FreewayRamp  
**Keywords:**

**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYRAMP\_FractionalOffset\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** In a group of dependent metered lanes, the start of the green interval for any lane can occur after a variable time (fraction of the cycle length) of the green interval for any lane in the same dependency group. The offset time is equal to the cycle length divided by the number of metered lanes in the dependency group.  
**Definition Source:** Ramp Metering Glossary  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYRAMP\_FreewayCapacity\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The capacity of the freeway in vehicles per hour per lane.  
**Definition Source:** Traffic Engineering, McShane, et al  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYRAMP\_FreewayLane\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Denotes the lane of the freeway that feeds lane 1 of the off-ramp, if one exists.  
**Definition Source:** CORSIM Manual  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYRAMP\_FreewayVolume\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The total freeway volume. Generally considered at the point where it is at the maximum level, i.e.,upstream of an off-ramp and downstream of an on-ramp.  
**Definition Source:** HCM 5-3  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYRAMP\_LaneOccupancy \_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The percentage of time that the ramp meter detector is actuated.  
**Definition Source:** Ramp Metering Glossary  
**Class Name:** FREEWAYRAMP  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**

**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYRAMP\_LevelOfService\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.  
**Definition Source:** HCM A-3  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYRAMP\_MeteringHeadway\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The time separation (in seconds) between successive green signals in a ramp lane.  
**Definition Source:** CORSIM Manual - Implied  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:** FREEWAYRAMP\_SpeedThreshold\_quantity  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:** SS.ssss  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799 These values would probably be implemented as a table with FREEWAYRAMP\_SpeedThreshold\_quantity.

---

**Descriptive Name:** FREEWAYRAMP\_MeteringType\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A system in which the entry of vehicles onto a freeway from an on-ramp is controlled by a traffic signal allowing a fixed number of vehicles to enter during each cycle.  
**Definition Source:** Ramp Metering Glossary  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**

**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Clock Time, 1=Demand/Capacity, 2=Gap Acceptance Merge Control,  
3=Isolated Pre-timed, 4=Local Coordinated, 5=Mainline, 6=Speed Control  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYRAMP\_MeterRate\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Number of vehicles allowed to enter a given section of a roadway per unit time.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYRAMP\_MeterStartTime\_time  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The time for the onset of metering.  
**Definition Source:** CORSIM  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Character – Numeric String  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:** HHMMSS.ssss  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYRAMP\_NumberOfLanes\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The total number of freeway ramp lanes.

**Definition Source:** CORSIM  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYRAMP\_OffRampSignLocation\_location  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The location of the off ramp sign on the freeway.  
**Definition Source:** CORSIM Manual  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYRAMP\_RampID\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A unique number identifying the ramp. See RAMP\_IdNumber\_number in TMDD.  
**Definition Source:** CORSIM  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYRAMP\_RampType\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A code to indicate the type of ramp.  
**Definition Source:** CORSIM  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=On Ramp, 1=Off Ramp, 2=Freeway To Freeway  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYRAMP\_UpstreamFreewaySegmentID\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A unique number identifying the upstream freeway segment.  
**Definition Source:** CORSIM  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FREEWAYWEAVINGAREA  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Sections of the freeway where two or more vehicle flows must cross each other's path along a length of the freeway.  
**Definition Source:** HCM 3-2  
**Class Name:** FreewayWeavingArea  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**

Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: FREEWAYWEAVINGAREA\_MinimumAverageNonWeavingSpeed\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: Average minimum running speed for all non-weaving vehicles occupying a given section of highway over some time.  
Definition Source: HCM implied  
Class Name: FreewayWeavingArea  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: FREEWAYWEAVINGAREA\_MinimumAverageWeavingSpeed\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: Average minimum running speed for all weaving vehicles occupying a given section of highway over some time.  
Definition Source: HCM implied  
Class Name: FreewayWeavingArea  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: FREEWAYWEAVINGAREA\_Volume\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The number of persons or vehicles passing a point on a lane, roadway, or other trafficway during some time interval, often taken to be 1 hr, expressed in vehicles.  
Definition Source: HCM A-5  
Class Name: FreewayWeavingArea  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:



**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** FUELCONSUMPTION\_Rate\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The fuel consumption rate for the specified Vehicle Performance Index.  
**Definition Source:** CORSIM Record 172  
**Class Name:** FuelConsumption  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** GRADE  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The slope of the roadway measured as a percentage of deviation from horizontal. A vertical slope would be a grade of 100%.  
**Definition Source:**  
**Class Name:** Grade  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** GRADE\_Location\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The distance on the link from the upstream end.  
**Definition Source:** TWOPAS  
**Class Name:** Grade

**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** GRADE\_Percent\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The percent grade at a point on a link.  
**Definition Source:** TWOPAS  
**Class Name:** Grade  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** GRADE\_SightDistance\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The sight distance at a point on a link.  
**Definition Source:** TWOPAS  
**Class Name:** Grade  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** GUIDESIGN  
**Descriptive Name Context:** Traffic Simulation

**Definition:** Any traffic sign used to provide information to a motorist or pedestrian.  
**Definition Source:** Traffic Engineering, McShane, et al  
**Class Name:** GuideSign  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** HIGHWAY  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A non-freeway road used for intercity travel.  
**Definition Source:**  
**Class Name:** HOVLane  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** HOVLANE  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** High Occupancy Vehicle Lane. A type of lane designated for travel only by vehicles with multiple occupants.  
**Definition Source:** Traffic Engineering, McShane, et al  
**Class Name:** HOVLane  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INCIDENTDETECTION  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The arrangement of detectors and processing of detector information to arrive at the decision that some type of incident has probably occurred in the traffic stream. May also be done by visual and third-party reporting means.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** IncidentDetection  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INCIDENTDETECTION\_OffLineAlgorithmType\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This code specifies the type of algorithm to be used for off-line incident detection.  
**Definition Source:** CORSIM Record 64  
**Class Name:** IncidentDetection  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INCIDENTDETECTION\_OffLineEvaluationFrequency\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The evaluation frequency for MOE estimation and point processing or evaluation frequency for surveillance detectors in seconds.  
**Definition Source:** CORSIM Record 64  
**Class Name:** IncidentDetection  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**

Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: INCIDENTDETECTION\_OffLineParameterValue\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: A parameter value to be used in the detection algorithm.  
Definition Source: CORSIM Record 65  
Class Name: IncidentDetection  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: INCIDENTDETECTION\_OffLinePollingFrequency\_number  
Descriptive Name Context: Traffic Simulation  
Definition: The polling frequency of the incident detector in number / second.  
Definition Source: CORSIM Record 64  
Class Name: IncidentDetection  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: Integer  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: INCIDENTDETECTION\_OffLineStationID\_number  
Descriptive Name Context: Traffic Simulation  
Definition: The number of the surveillance station to be used for MOE estimation, point processing and off-line incident detection.  
Definition Source: CORSIM Record 67  
Class Name: IncidentDetection  
Keywords:  
Related Data Concept:  
Relationship Type:

**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INCIDENTDETECTION\_OnLineAlgorithmType\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This code specifies the type of algorithm to be used for on-line incident detection.  
**Definition Source:** CORSIM Record 61  
**Class Name:** IncidentDetection  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INCIDENTDETECTION\_OnLineEvaluationFrequency\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The evaluation frequency for incident detection in number of time steps between evaluations.  
**Definition Source:** CORSIM Record 61  
**Class Name:** IncidentDetection  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INCIDENTDETECTION\_OnLineParameterValue\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A parameter value to be used in the detection algorithm.

**Definition Source:** CORSIM Record 62  
**Class Name:** IncidentDetection  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INCIDENTDETECTION\_OnLinePollingFrequency\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The polling frequency of the incident detector in number / second.  
**Definition Source:** CORSIM Record 61  
**Class Name:** IncidentDetection  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INCIDENTDETECTION\_OnLineStationID\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The number of the surveillance station to be used for on-line incident detection.  
**Definition Source:** CORSIM Record 63  
**Class Name:** IncidentDetection  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INITIALIZATION  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Run control initialization  
**Definition Source:**  
**Class Name:** RCTRL  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTION  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The common area of roadways that meet or cross.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** Intersection  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONCONTROLLERHARDWARE  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Any hardware device used to control traffic at intersections.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** IntersectionControllerHardware  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**



**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONDISPLAYHARDWARE  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Any hardware display device used to control traffic at intersections.  
**Definition Source:** Traffic Engineering, McShane, et al  
**Class Name:** IntersectionDisplayHardware  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** An intersection whose traffic is controlled by a controller.  
**Definition Source:** HCM Implied  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_AllowableGap\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The time gap between successive moving vehicles at which a greater gap should terminate the green on one phase and transfer right-of-way to another phase.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**

**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_AmberIntervalResponse\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The response of drivers to the onset of the amber indication is expressed in terms of an acceptable deceleration. The deceleration that is required for the vehicle to stop is readily calculated, knowing the current position and speed of the vehicle. If deceleration is acceptable the vehicle will stop; otherwise, it will continue through the intersection.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_ApproachDelay\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Stopped-time delay at a signalized intersection plus time lost because of deceleration to and acceleration from a stop, generally estimated as 1.3 times the stopped time delay.  
**Definition Source:** HCM A-1  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_AverageStoppedTimeDelay\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The total time vehicles are stopped in an intersection approach or lane group during a specified time interval divided by the volume departing from the approach or lane group during the same time period, in seconds per vehicle.

**Definition Source:** HCM A-1  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_BackgroundCycle\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The term used to identify the cycle length established by a coordination unit and master control in coordinated systems.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_Call\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A registration of a demand for right-of-way by traffic at a controller unit. The call to the controller is via detector actuation.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_ChangeInterval\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The "yellow" plus "all red" intervals that occur between phases of a traffic signal to provide for clearance of the intersection before conflicting movements are released.  
**Definition Source:** HCM A-1  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_CycleLength\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The time required for one complete sequence of signal phases.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** number  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_DetectorSetback\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The time required for one complete sequence of signal phases.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**

Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_DetectorType\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A device for indicating the presence or passage of vehicles or pedestrians. This general term is usually supplemented with a modifier, i.e., loop detector, magnetic detector indicating type.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Check-In, 1=Check\_Out, 2=Merge, 3=Queue, 4=Demand, 5=Passage, 6=Induction, 7=Video Image  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_DischargeHeadway\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The mean time gap between vehicles discharging from a standing queue.  
**Definition Source:** CORSIM User's Guide 5-22  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_EffectiveGreen\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The time allocated for a given traffic movement (green plus yellow) at a signalized intersection less the start-up and clearance lost times for the movement.  
**Definition Source:** HCM A-2  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**

ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: INTERSECTIONSIGNALIZED\_EffectiveRed\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The time during which a given traffic movement or set of movements is directed to stop; cycle length minus effective green time.  
Definition Source: HCM A-2  
Class Name: IntersectionSignalized  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: INTERSECTIONSIGNALIZED\_LagPhase\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The lag phase setting designates which phase of a phase pair displays green first, before the other phase. A phase pair is defined as adjacent phases in the same ring on the same side of the barrier on a standard NEMA phase diagram. In a standard NEMA 8 phase configuration operating in leading dual lefts on both streets, phases 2, 4, 6 and 8 are lag phases while phases 1, 3, 5, and 7 are leading phases.  
Definition Source: FHWA Control Systems Glossary  
Class Name: IntersectionSignalized  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_MaximumSpeedLeftTurn\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Moving vehicles must slow as they approach an intersection if they are to negotiate a turning maneuver, even when unimpeded by other vehicles. The default turning speed for negotiating left turns is 22 fps (7 m/s). The maximum allowable left turn speed is 44 fps (14 m/s).  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_MaximumSpeedRightTurn\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Moving vehicles must slow as they approach an intersection if they are to negotiate a turning maneuver, even when unimpeded by other vehicles. The default turning speed for negotiating right turns is 13 fps (4 m/s). The maximum allowable right turn speed is 26 fps (8 m/s).  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_PedestrianDelay\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The duration of vehicular delay due to pedestrian interaction during a vehicle green phase.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float

**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_ProbabilityLeftTurnJump\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A left turn jumper is a vehicle that is first in queue when a signal changes to green and executes a left turn maneuver before the oncoming traffic moves.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_StartingDelay\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A delay experienced in initiating the movement of queued traffic from a stop to a maximum flow rate through a signalized intersection.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** IntersectionSignalized  
**Keywords:** Start-up Lost Time  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_StartupLostTime\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The delay experienced by the first vehicle in queue when responding to a phase change from red to green.  
**Definition Source:** CORSIM User's Guide 5-22



**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONSIGNALIZED\_StopDelay\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** For each turn movement, the total time that vehicles of the specified turn movement were stopped on the link. Stop time is defined as any time that a vehicle is stopped on a link including buses in dwell.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONUNSIGNALIZEDCONTROLLED  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** An intersection that is controlled by devices other than signals, such as stop signs.  
**Definition Source:**  
**Class Name:** IntersectionUnsignalizedControlled  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONUNSIGNALIZEDCONTROLLED\_AcceptanceGap\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A vehicle at a stop line facing a sign cannot discharge until an acceptable gap is available in the cross-street traffic. The acceptable gap depends on the type of sign, driver characteristic and the total number of lanes to be crossed. Likewise for a vehicle turning left or right.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** IntersectionUnsignalizedControlled  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONUNSIGNALIZEDCONTROLLED\_CriticalGap\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The minimum time interval between vehicles in a major traffic stream that permits side-street vehicle at a stop-controlled approach to enter the intersection under prevailing traffic and roadway conditions, in seconds.  
**Definition Source:** HCM A-2  
**Class Name:** IntersectionUnsignalizedControlled  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONUNSIGNALIZEDCONTROLLED\_LeftTurnAcceptableGap\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The acceptable gap for Left-Turns.  
**Definition Source:** CORSIM Record 145  
**Class Name:** IntersectionUnsignalizedControlled  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float

**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONUNSIGNALIZEDCONTROLLED\_MovementCapacity\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The capacity of a specific movement at a stop-controlled intersection approach, assuming that the movement has exclusive use of a separate lane, in passenger cars per hour.  
**Definition Source:** HCM A-3  
**Class Name:** IntersectionUnsignalizedControlled  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONUNSIGNALIZEDCONTROLLED\_NewFSAcceptanceGap\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The acceptable gap to cross the far-side of a cross street.  
**Definition Source:** CORSIM Record 143  
**Class Name:** IntersectionUnsignalizedControlled  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONUNSIGNALIZEDCONTROLLED\_NewNSAcceptanceGap\_quantity  
**Descriptive Name Context:** Traffic Simulation

**Definition:** The acceptable gap to cross a near-side cross street.  
**Definition Source:** CORSIM Record 142  
**Class Name:** IntersectionUnsignalizedControlled  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** INTERSECTIONUNSIGNALIZEDCONTROLLED\_RightTurnOnRedAcceptableGap\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The acceptable gap for Right Turn on red or at signs.  
**Definition Source:** CORSIM Record 145  
**Class Name:** IntersectionUnsignalizedControlled  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LANE  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Unidirectional roadway that carries a single-file stream of vehicles.  
**Definition Source:**  
**Class Name:** Lane  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LANE\_AllowableMovements\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The movements that are allowed through the intersection from this lane.  
**Definition Source:** CORSIM  
**Class Name:** Lane  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=none, 1=left, 2=through, 3=right, 4=leftdiagonal, 5=rightdiagonal  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799  
The code is a concatenation of all applicable movements. E.g. 12 would indicate left and through movements for this lane.

---

**Descriptive Name:** LANE\_AntireferenceEndLocation\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Distance along this Lane's Segment from the reference end of the Segment to the antireference end of the Lane.  
**Definition Source:**  
**Class Name:** Lane  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**

**Descriptive Name:** LANE\_Channelization\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Traffic restrictions for the lane.  
**Definition Source:** CORSIM  
**Class Name:** Lane  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:** 0=unrestricted, 1=left turn only, 2=buses only, 3=closed, 4=right turn only, 5=carpool only, 6=carpools and buses only, 7=right, diagonal and/or through, 8=left, diagonal and/or through, 9=restricted only by geometry and adjacent lanes, 10=diagonal only, 11=through only.

**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LANE\_DetectorLength\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The effective loop length in feet  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** Lane  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Check-In, 1=Check\_Out, 2=Merge, 3=Queue, 4=Demand, 5=Passage, 6=Induction, 7=Video Image.  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LANE\_DetectorLocation\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The location of the detector from the upstream end of the lane in feet.  
**Definition Source:** CORSIM  
**Class Name:** Lane  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LANE\_DetectorType\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A device for indicating the presence or passage of vehicles or pedestrians. This general term is usually supplemented with a modifier, i.e., loop detector, magnetic detector indicating type.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** Lane  
**Keywords:**  
**Related Data Concept:**

**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Check-In, 1=Check\_Out, 2=Merge, 3=Queue, 4=Demand, 5=Passage,  
6=Induction, 7=Video Image.  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LANE\_IncidentCode\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The incident code specifying the effect on the lane.  
**Definition Source:** CORSIM  
**Class Name:** Lane  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Normal Speed, 1=Traffic capacity reduced by the rubberneck factor at the  
point of the incident.  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LANE\_Length\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The travel distance from the upstream end to the downstream end of a Lane.  
(Less than or equal to the length of the Segment to which the Lane belongs.)  
**Definition Source:**  
**Class Name:** Lane  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LANE\_Type\_code

**Descriptive Name Context:** Traffic Simulation  
**Definition:** Lane type.  
**Definition Source:** CORSIM  
**Class Name:** Lane  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:** 0=surface street, 1=freeway mainline, 2=freeway on ramp, 3=freeway off ramp.  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LANE\_Width\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The width of the lane.  
**Definition Source:**  
**Class Name:** Lane  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LANEMARKING  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A marking on the lane to inform or direct drivers or pedestrians. Examples would be passing/no passing lines, directional arrows and pedestrian crossing lines.  
**Definition Source:**  
**Class Name:** LaneMarking  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**



**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A one-way section of roadway between two nodes. It is intended that attributes of the TSDD's Link will conform as much as possible to the TMDD's LINK data elements.  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_AverageDelayTime\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** For each turn movement, the average time that vehicles were delayed on the link. Calculated as the delay time for the turn movement divided by vehicle trips for the turn movement.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_AverageSpeed\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** For each turn movement, the average speed of vehicles on a link that have completely traversed the link. Calculated as vehicle miles divided by the total time.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**

**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_Capacity\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_Capacity\_quantity in the TMDD: "The Link maximum capacity in vehicles per hour."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_Delay\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_Delay\_quantity in the TMDD: "Calculated delay for vehicles driving along a particular Link. this is additional time it will take above that recorded during free flow conditions to travel from one end of the link to the other."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_Density\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_Density\_quantity in the TMDD: "Vehicle concentration per kilometer (in vehicles per kilometer) of the Link."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_DesignSpeed\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_DesignSpeed\_quantity in the TMDD: "The Link design speed in kilometers per hour."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_Direction\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_Direction\_code in the TMDD: "The direction of the Link traffic flow, e.g E,W,N,S."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Octetstring  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**

**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_DistanceToStopLine\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The distance between the stop line and the curb line.  
**Definition Source:** CORSIM Record 80  
**Class Name:** LINK  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_FreeFlowSpeedPercentage\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This percentage is correlated with the driver characteristics and is multiplied with the Mean Free Flow Speed for the link to obtain a Free Flow Speed for drivers of the specified characteristics for this link.  
**Definition Source:** CORSIM Record 147  
**Class Name:** LINK  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_GroupID\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** When a link is part of an aggregation such as an interchange or a corridor, this number can be used to identify members of a group.  
**Definition Source:** CORSIM Record 90 and 95  
**Class Name:** LINK  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**

**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_GroupSequence\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** When a link is part of an aggregation such as an interchange or a corridor, this number can be used to sequence members of a group.  
**Definition Source:** CORSIM Record 90 and 95  
**Class Name:** LINK  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_HeightRestriction\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_HeightRestriction\_quantity in the TMDD: "Minimum vertical clearance on a Link in centimeters."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_IdNumber\_number  
**Descriptive Name Context:** Traffic Simulation

**Definition:** See LINK\_IdNumber\_number in the TMDD: "An unique numerical designation for the Link."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_LaneAlignmentdownstream\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The lane number of the downstream through node that aligns with downstream alignment lane of this link.  
**Definition Source:** CORSIM  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_LaneAlignmentupstream\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The lane number of the upstream node that aligns with the upstream alignment lane of this link.  
**Definition Source:** CORSIM  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**

**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_LeftDiagonalDownstream\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The node number of the downstream node that can receive left diagonal traffic.  
**Definition Source:** CORSIM  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_LeftShoulderWidth\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_LeftShoulderWidth\_quantity in the TMDD: "The width of the left shoulder of the Link (in centimeters)."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_LeftTurnDownstream\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The node number of the downstream node that can receive left turning traffic.  
**Definition Source:** CORSIM  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**

Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: LINK\_LeftTurnPocketLanes\_number  
Descriptive Name Context: Traffic Simulation  
Definition: The number of lanes in the left turn pocket. See LINK\_LeftTurnPocketLaneNumber\_quantity in TMDD.  
Definition Source: CORSIM  
Class Name: Link  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: integer  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: LINK\_LeftTurnPocketLength\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The length of the left turn pocket (if any). See LINK\_LeftTurnPocketLength\_quantity in TMDD.  
Definition Source: CORSIM  
Class Name: Link  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: LINK\_Length\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: See LINK\_Length\_quantity in the TMDD: "The length of the link in meters."  
Definition Source:  
Class Name: Link  
Keywords:  
Related Data Concept:  
Relationship Type:



**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_LengthRestriction\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_LengthRestriction\_quantity in the TMDD: "Maximum Vehicle Length allowable on a Link in centimeters."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_LevelOfService\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_LevelOfService\_code in the TMDD: "A qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers as defined in the Highway Capacity Manual."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Octetstring  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_MedianType\_code  
**Descriptive Name Context:** Traffic Simulation

**Definition:** See LINK\_MedianType\_code in the TMDD: "Type of median separation for the Link."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Octetstring  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_NumLanes\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_NumLanes\_quantity in the TMDD: "The lowest number of lanes at any point in the Link."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_NumLanesOpen\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_NumLanesOpen\_quantity in the TMDD: "The lowest number at any point of lanes currently open in the link."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**

**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_Occupancy\_percent  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_Occupancy\_percent in the TMDD: "Percent occupancy measured for the Link."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_OpposingLeftTurnDownstream\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The node number of the upstream node, downstream, that opposes left turning traffic.  
**Definition Source:** CORSIM  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_PavementCondition\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The condition of the pavement.  
**Definition Source:** CORSIM  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**

**Valid Value Range:**  
**Valid Value List:** 0=dry, 1=wet.  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_PavementType\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_PavementType\_code in the TMDD: "The type of material from which the pavement is constructed (e.g. concrete, asphalt)."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Character  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** C=concrete, A=asphalt, G=grooved concrete, S=steel grid, O=other.  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_QueueDischargeHeadway\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The delay until discharge for each queued vehicle. A different headway for each driver characteristic is assigned.  
**Definition Source:** CORSIM Record 149  
**Class Name:** LINK  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_RightDiagonalDownstream\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The node number of the downstream node that can receive right diagonal traffic.  
**Definition Source:** CORSIM  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**

**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_RightShoulderWidth\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_RightShoulderWidth\_quantity in the TMDD: "The width of the right shoulder for the Link in centimeters."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_RightTurnDownstream\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The node number of the downstream node that can receive right turning traffic.  
**Definition Source:** CORSIM  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_RightTurnPocketLanes\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The number of lanes in the right turn pocket. See

**Definition Source:** LINK\_RightTurnPocketLane\_quantity in TMDD.  
**Class Name:** CORSIM  
**Keywords:** Link  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_RightTurnPocketLength\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The length of the right turn pocket (if any). See LINK\_RightTurnPocketLength\_quantity in TMDD.  
**Definition Source:** CORSIM  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_SightDistance\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The forward visibility of a driver at the stop line to see approaching vehicles.  
**Definition Source:** CORSIM Record 80  
**Class Name:** LINK  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_Speed\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_Speed\_quantity in the TMDD: "The average Link vehicular speed in Kilometers per hour."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_SpeedLimit\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_SpeedLimit\_quantity in the TMDD: "Speed limit for automobiles in Kilometers per hour."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_StartUpLostTime\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The start-up lost time for the first vehicle in queue when the signal turns to green. A different value for each driver characteristic is assigned.  
**Definition Source:** CORSIM Record 149  
**Class Name:** LINK  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**

Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: LINK\_Status\_code  
Descriptive Name Context: Traffic Simulation  
Definition: See LINK\_Status\_code in the TMDD: "The Link Status."  
Definition Source:  
Class Name: Link  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: Octetstring  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: LINK\_ThroughDownstreamNode\_number  
Descriptive Name Context: Traffic Simulation  
Definition: The node number of the downstream node that can receive through traffic.  
Definition Source: CORSIM  
Class Name: Link  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: Integer  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: LINK\_TruckSpeedLimit\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: See LINK\_TruckSpeedLimit\_quantity in the TMDD: "Speed limit for trucks in kilometers per hour."  
Definition Source:  
Class Name: Link  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:



**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_Type\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_Type\_code in the TMDD: "The designation of the Link type. (Fwy., Art., Psu., Sur., Ded., Rail, Bus, Air, Ferry, other modes)."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Octetstring  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_UpstreamNode\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The number of the upstream node.  
**Definition Source:** CORSIM  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_Volume\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_Volume\_quantity in the TMDD: "Projected or measured hourly volume for the Link expressed in vehicles per hour."  
**Definition Source:**

**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** LINK\_WeightRestriction\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See LINK\_WeightRestriction\_quantity in the TMDD: "Maximum Vehicle Weight allowable on a Link in kilograms."  
**Definition Source:**  
**Class Name:** Link  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_Advantage\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Advantage threshold for discretionary maneuver.  
**Definition Source:** CORSIM Record 70  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_CollisionAvoidance\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Parameter for collision avoidance time period. Used in gap acceptance algorithm.  
**Definition Source:** CORSIM Record 70  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:** 0-6 where 0 is the most time and 6 is the least time.  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_FollowerVehicleDecelerationRate\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Deceleration rate of follower vehicle.  
**Definition Source:** CORSIM Record 81  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_LeadVehicleDecelerationRate\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Deceleration rate of the lead vehicle.  
**Definition Source:** CORSIM Record 81  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**

**Internal Layout Minimum Size:**

**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_LeftTurnAcceptableGap\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The acceptable gap in oncoming traffic for a driver attempting a left turn.  
**Definition Source:** CORSIM Record 145  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_LeftTurnJumpProbability\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The probability that the first vehicle in queue will execute a left-turn when the signal changes to green.  
**Definition Source:** CORSIM Record 140  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_LeftTurnLaggerTurnProbability\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The probability that a driver will execute a left-turn across opposing traffic during a NO GO interval.  
**Definition Source:** CORSIM Record 141  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**

**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_MaximumHeadway\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The headway above which no driver will attempt the maneuver.  
**Definition Source:** CORSIM Record 81  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_MaximumLeftTurnSpeed\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The maximum speed for a left turn.  
**Definition Source:** CORSIM Record 140  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_MaximumRightTurnSpeed\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The maximum speed for a right turn.  
**Definition Source:** CORSIM Record 140  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**

**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_MeanDistance\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Mean longitudinal distance over which drivers decide to perform on lane change.  
**Definition Source:** CORSIM Records 81 and 152  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_MinimumDeceleration\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The minimum deceleration at the beginning of a discretionary maneuver. Used in the computation of acceptable risk.  
**Definition Source:** CORSIM Record 81  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_MinimumHeadway\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Headway below which all drivers will attempt the maneuver.  
**Definition Source:** CORSIM Record 81

**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_Multiplier\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Multiplier for desire to complete discretionary maneuver.  
**Definition Source:** CORSIM Record 70  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_RightTurnOnRedAcceptableGap\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The acceptable fag in oncoming traffic for a driver attempting a right-turn on red of at a sign.  
**Definition Source:** CORSIM Record 145  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_SafetyFactor\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The degree of caution used by the driver.  
**Definition Source:** CORSIM Record 81  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_SpillbackProbability\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The probability that a vehicle about to discharge will join a spillback.  
**Definition Source:** CORSIM Record 141  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_TimeToComplete\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Time to complete the maneuver.  
**Definition Source:** CORSIM Records 70 and 81  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**



**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_Type\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The code identifying the type of maneuver to be performed.  
**Definition Source:** CORSIM Records 70, 81 and 140  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Lane change, 1=Left turn jump, 2=Right turn  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_UrgencyThreshold\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Urgency of a driver to initiate a discretionary maneuver. Based on the driver's aggressiveness, the remaining distance available and the complexity of the maneuver.  
**Definition Source:** CORSIM Record 81  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MANEUVER\_YieldingPercentage\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Percentage of drivers desiring to yield the right-of-way to maneuvering vehicles.  
**Definition Source:** CORSIM Record 70  
**Class Name:** Maneuver  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**

Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: MARKING  
Descriptive Name Context: Traffic Simulation  
Definition: Any mark on a lane, link, highway, etc. used to control drivers or pedestrians.  
Definition Source:  
Class Name: Marking  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type:  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: MOE\_Algorithm\_Type\_code  
Descriptive Name Context: Traffic Simulation  
Definition: The code of the MOE estimation algorithm to be applied.  
Definition Source: CORSIM Record 66  
Class Name: MOE  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: Integer  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: MOE\_Arterial\_AverageControlDelay\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Control delay may also be referred to as *signal delay*.  
Definition Source: HCM 9-7  
Class Name: Arterial  
Keywords:  
Related Data Concept:  
Relationship Type:

**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_Arterial\_AverageRunningTime\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The average time vehicles are in motion while traversing a highway segment of given length, excluding stopped-time delay, in seconds per vehicle or minutes per vehicle.  
**Definition Source:** HCM A-1  
**Class Name:** Arterial  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_Arterial\_AverageTravelSpeed\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The average speed of a traffic stream computed as the length of a highway segment divided by the average travel time of vehicles traversing the segment, in miles per hour.  
**Definition Source:** HCM A-1  
**Class Name:** Arterial  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_Arterial\_LevelOfService\_code

**Descriptive Name Context:** Traffic Simulation  
**Definition:** A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.  
**Definition Source:** HCM A-3  
**Class Name:** Arterial  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_Freeway\_Capacity\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The maximum sustained (15-min) rate of flow at which traffic can pass a point or uniform segment of freeway under prevailing roadway and traffic conditions. Capacity is defined for a single direction of flow, and is expressed in vehicle per hour (vph).  
**Definition Source:** HCM 3-3  
**Class Name:** Freeway  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_Freeway\_Density\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The number of vehicles occupying a given length of lane or roadway averaged over time, usually expressed as vehicles per mile or vehicles per mile per lane.  
**Definition Source:** HCM A-2  
**Class Name:** Freeway  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**

Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: MOE\_Freeway\_LevelOfService\_code  
Descriptive Name Context: Traffic Simulation  
Definition: A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.  
Definition Source: HCM A-3  
Class Name: Freeway  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type:  
Representation Class Term:  
Value Domain:  
Valid Value Range: A - F  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: MOE\_Freeway\_MaximumServiceFlowRate\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The highest 15-min rate of flow that can be accommodated on a highway facility under ideal conditions while maintaining the operating characteristics for a stated level of service, expressed as passenger cars per hour per lane.  
Definition Source: HCM A-3  
Class Name: Freeway  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:

Descriptive Name: MOE\_Freeway\_Speed\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: A rate of motion, in distance per unit of time.  
 $S = d / t$  (mph or fps).  
Definition Source: Traffic Engineering, McShane, et al  
Class Name: Freeway  
Keywords:  
Related Data Concept:

**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_Freeway\_Volume\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The number of persons or vehicles passing a point on a lane, roadway, or other trafficway during some time interval, often taken to be 1 hr, expressed in vehicles.  
**Definition Source:** HCM A-5  
**Class Name:** Freeway  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_FreewayRamp\_DivergeVolume\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The total volume in the traffic stream which will separate. For the case of a one-lane, right-side on-ramp, the diverge volume is equal to the lane 1 volume immediately upstream of the subject ramp.  
**Definition Source:** HCM 5-3  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_FreewayRamp\_FreewayVolume\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The total freeway volume. Generally considered at the point where it is at the maximum level, i.e.,upstream of an off-ramp and downstream of an on-ramp.  
**Definition Source:** HCM 5-3  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_FreewayRamp\_LevelOfService\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.  
**Definition Source:** HCM A-3  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_FreewayRamp\_MergeVolume\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The total volume in the traffic streams which will join. For the case of a one-lane, right-side on-ramp, the merge volume is the sum of the lane 1 volume plus the ramp volume.  
**Definition Source:** HCM 5-3  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**

Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

**Descriptive Name:** MOE\_FreewayRamp\_Volume\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The number of persons or vehicles passing a point on a lane, roadway, or other trafficway during some time interval, often taken to be 1 hr, expressed in vehicles.  
**Definition Source:** HCM A-5  
**Class Name:** FreewayRamp  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_FreewayWeavingArea\_LevelOfService\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.  
**Definition Source:** HCM A-3  
**Class Name:** FreewayWeavingArea  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_FreewayWeavingArea\_MinimumAverageNonWeavingSpeed\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Average minimum running speed for all non-weaving vehicles occupying a given section of highway over some time.  
**Definition Source:** HCM implied  
**Class Name:** FreewayWeavingArea



**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_FreewayWeavingArea\_MinimumAverageWeavingSpeed\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Average minimum running speed for all weaving vehicles occupying a given section of highway over some time.  
**Definition Source:** HCM implied  
**Class Name:** FreewayWeavingArea  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_FreewayWeavingArea\_Volume\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The number of persons or vehicles passing a point on a lane, roadway, or other trafficway during some time interval, often taken to be 1 hr, expressed in vehicles.  
**Definition Source:** HCM A-5  
**Class Name:** FreewayWeavingArea  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_IntersectionSignalized\_ApproachCapacity\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The maximum rate of flow (for the subject approach) which may pass through the intersection under prevailing traffic, roadway and signalization conditions.  
**Definition Source:** HCM 9-3  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_IntersectionSignalized\_ApproachVolume\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The number vehicles which may pass through the intersection under prevailing traffic, roadway and signalization conditions during some time interval, often taken to be 1 hr, expressed in vehicles.  
**Definition Source:** HCM implied  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_IntersectionSignalized\_CriticalVCRatio\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A v/c ratio for the intersection as a whole, considering only the lane groups or approaches that have the highest flow ration, v/s, for a given signal phase.  
**Definition Source:** HCM 9-4  
**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**

Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: MOE\_IntersectionSignalized\_FlowRatio\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The ratio of the actual flow rate for the approach or lane group to the saturation flow rate.  
Definition Source: HCM 9-3  
Class Name: IntersectionSignalized  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: MOE\_IntersectionSignalized\_LevelOfService\_code  
Descriptive Name Context: Traffic Simulation  
Definition: A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.  
Definition Source: HCM A-3  
Class Name: IntersectionSignalized  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type:  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: MOE\_IntersectionSignalized\_SaturationFlowRate\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The maximum rate of flow that can pass through a given intersection approach or lane group under prevailing traffic and roadway conditions, assuming that the approach or lane group had 100 percent of real time available as effective green time.  
Definition Source: HCM 9-3

**Class Name:** IntersectionSignalized  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_IntersectionUnsignalizedControlled\_AverageDelay\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The total additional travel time experienced by drivers, passengers, or pedestrians as a result of control measures and interaction with other users of the facility divided by the volume departing from the corresponding cross section of the facility.  
**Definition Source:** HCM A-1  
**Class Name:** IntersectionUnsignalizedControlled  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**

**Descriptive Name:** MOE\_IntersectionUnsignalizedControlled\_ConflictingVolume\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The volume of traffic that conflicts with a specific movement at an unsignalized intersection.  
**Definition Source:** HCM A-2  
**Class Name:** IntersectionUnsignalizedControlled  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_IntersectionUnsignalizedControlled\_QueueLength\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** (1) Number of vehicles stopped in a lane behind the stopline at a traffic signal.  
(2) Number of vehicles that are stopped or moving in a line where the movement of each vehicle is constrained by that of the lead vehicle.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** IntersectionUnsignalizedControlled  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_IntersectionUnsignalizedControlled\_Volume\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The number of persons or vehicles passing a point on a lane, roadway, or other trafficway during some time interval, often taken to be 1 hr, expressed in vehicles.  
**Definition Source:** HCM A-5  
**Class Name:** IntersectionUnsignalizedControlled  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_MultilaneHighway\_AverageTravelSpeed\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The average speed of a traffic stream computed as the length of a highway segment divided by the average travel time of vehicles traversing the segment, in miles per hour.  
**Definition Source:** HCM A-1  
**Class Name:** MultilaneHighway  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**

Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: MOE\_MultilaneHighway\_Density\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The number of vehicles occupying a given length of lane or roadway averaged over time, usually expressed as vehicles per mile or vehicles per mile per lane.  
Definition Source: HCM A-2  
Class Name: MultilaneHighway  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: MOE\_MultilaneHighway\_FreeFlowSpeed\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: (1) The theoretical speed of traffic when density is zero, that is, when no vehicles are present; (2) the average speed of vehicles over an arterial segment not close to signalized intersections under conditions of low volume.  
Definition Source: HCM A-2  
Class Name: MultilaneHighway  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: MOE\_MultilaneHighway\_LevelOfService\_code  
Descriptive Name Context: Traffic Simulation  
Definition: A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

**Definition Source:** HCM A-3  
**Class Name:** MultilaneHighway  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_MultilaneHighway\_ServiceFlowRate\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The maximum hourly rate at which persons or vehicles can be reasonably expected to traverse a point of a lane or roadway during a given time period (usually 15 min) under prevailing roadway, traffic, and control conditions while maintaining a designated level of service, expressed as vehicles per hour or vehicles per hour per lane.  
**Definition Source:** HCM A-4  
**Class Name:** MultilaneHighway  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**

**Descriptive Name:** MOE\_MultilaneHighway\_Volume\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The number of persons or vehicles passing a point on a lane, roadway, or other trafficway during some time interval, often taken to be 1 hr, expressed in vehicles.  
**Definition Source:** HCM A-5  
**Class Name:** MultilaneHighway  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**

**Internal Layout Minimum Size:****Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_Pedestrian\_Density\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The average number of pedestrians per unit of area within a walkway or queuing area, expressed as pedestrians per square foot.  
**Definition Source:** HCM 13-3  
**Class Name:** Pedestrian  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_Pedestrian\_FlowRate\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The number of pedestrians passing a point per unit time, expressed as pedestrians per 15 minutes or pedestrians per minute; "point" refers to a perpendicular line of sight across the width of a walkway.  
**Definition Source:** HCM 13-3  
**Class Name:** Pedestrian  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_Pedestrian\_LevelOfService\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Convenience factors such as the ability to select walking speeds, bypass slower pedestrians, avoid conflicts with others and degrees of crowding in queuing areas, such as sidewalk corners, transit platforms, and other waiting areas.  
**Definition Source:** HCM 13-3  
**Class Name:** Pedestrian  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**



**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_Pedestrian\_Space\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The average area provided for each pedestrian in a walkway or queuing area, expressed in terms of square feet per pedestrian; this is the inverse of density, but is a more practical unit for the analysis of pedestrian facilities.  
**Definition Source:** HCM 13-3  
**Class Name:** Pedestrian  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_Pedestrian\_Speed\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The average pedestrian walking speed, generally expressed in units of feet per second.  
**Definition Source:** HCM 13-3  
**Class Name:** Pedestrian  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_Pedestrian\_UnitWidthFlow\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The average flow of pedestrians per unit of effective walkway width, expressed

as pedestrians per minute per foot.  
**Definition Source:** HCM 13-3  
**Class Name:** Pedestrian  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_Road\_AverageTravelTime\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The average time spent by vehicles traversing a road segment of given length, including all stopped-time delay, in seconds per vehicle or minutes per vehicle.  
**Definition Source:** HCM A-1  
**Class Name:** Road  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

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**Descriptive Name:** MOE\_Road\_LevelOfService\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.  
**Definition Source:** HCM 13-3  
**Class Name:** Road  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**

**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_Road\_Volume\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The number of persons or vehicles passing a point on a lane, roadway, or other trafficway during some time interval, often taken to be 1 hr, expressed in vehicles.  
**Definition Source:** HCM  
**Class Name:** Road  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_Transit\_LoadFactor\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The ratio of total passengers carried to the number of seats during a specified time period.  
**Definition Source:** HCM 12-3  
**Class Name:** Transit  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_Transit\_PersonCapacity\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The maximum number of persons that can be carried past a given location during a given time period under specified operating conditions without unreasonable delay, hazard, or restriction. Usually measured in terms of persons per hour.  
**Definition Source:** HCM 12-3  
**Class Name:** Transit  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**

**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_Transit\_PersonLevelOfService\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The quality of service offered the passenger within a transit vehicle, as determined by the available space per passenger.  
**Definition Source:** HCM A-3  
**Class Name:** Transit  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_Transit\_ProductiveCapacity\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A measure of efficiency or performance. The product of passenger capacity along a transit line and speed.  
**Definition Source:** HCM 12-3  
**Class Name:** Transit  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_TwoLaneHighway\_AverageTravelSpeed\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The average speed of a traffic stream computed as the length of a highway

segment divided by the average travel time of vehicles traversing the segment in both directions, in miles per hour.

**Definition Source:** HCM 8-2  
**Class Name:** TwoLaneHighway  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_TwoLaneHighway\_Capacity\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The maximum rate of flow at which persons or vehicles can be reasonably expected to traverse a point or uniform segment of a lane or roadway during a specified time period under prevailing roadway, traffic, and control conditions, usually expressed as vehicles per hour or persons per hour.

**Definition Source:** HCM A-1  
**Class Name:** TwoLaneHighway  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MOE\_TwoLaneHighway\_CapacityUtilization\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The ratio (v/c ratio) of the demand flow rate to the capacity of the facility.

**Definition Source:** HCM 8-2  
**Class Name:** TwoLaneHighway  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**

Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: MOE\_TwoLaneHighway\_DemandFlowRate\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The traffic volume expected to desire service past a point or segment of the highway system at some future time, or the traffic currently arriving or desiring service past such a point, usually expressed as vehicles per hour.  
Definition Source: HCM A-2  
Class Name: TwoLaneHighway  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: MOE\_TwoLaneHighway\_PercentTimeDelay\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The average percent of time that all vehicles are delayed while traveling in platoons due to the inability to pass.  
Definition Source: HCM 8-2  
Class Name: TwoLaneHighway  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: MOTORHOME  
Descriptive Name Context: Traffic Simulation  
Definition: A recreational motor vehicle which usually contains facilities for sleeping and eating.  
Definition Source:  
Class Name: MotorHome  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:

**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MULTILANEHIGHWAY  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A highway with at least two lanes for the exclusive use of traffic in each direction, with no or partial control of access, that may have periodic interruptions to flow at signalized intersections.  
**Definition Source:** HCM A-3  
**Class Name:** MultilaneHighway  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MULTILANEHIGHWAYDIVIDED  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A subclass of MultilaneHighway in which the opposing lanes are separated by a median or two-way left turn lane.  
**Definition Source:** HCM Implied  
**Class Name:** MultilaneHighwayDivided  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MULTILANEHIGHWAYUNDIVIDED  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A subclass of MultilaneHighway in which the opposing lanes are not separated

by a median or two-way left turn lane.  
**Definition Source:** HCM Implied  
**Class Name:** MultilaneHighwayUndivided  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** MULTIUNITTRUCK  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A truck whose cab (tractor) is a separate entity from its load bed (trailer).  
**Definition Source:**  
**Class Name:** Network  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** NETWORK  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A network is the aggregation of the important permanent components of a traffic model. Vehicles are not included because, for purposes of the model, they are transitory.  
**Definition Source:**  
**Class Name:** Network  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**



**Remarks:** Last Change 082799

---

**Descriptive Name:** NETWORK\_City\_text  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The name of the city where a Network is located.  
**Definition Source:**  
**Class Name:** Network  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** string  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** NETWORK\_County\_text  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The name of the county where a Network is located.  
**Definition Source:**  
**Class Name:** Network  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** string  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** NETWORK\_Description\_text  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A textual description of a Network. This attribute can contain whatever notes about the model the modeler chooses to make.  
**Definition Source:**  
**Class Name:** Network  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** string  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**

Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: NETWORK\_Name\_text  
Descriptive Name Context: Traffic Simulation  
Definition: A label for a traffic network. (Are there any constraints about uniqueness of the name? How could such a constraint be enforced?)  
Definition Source:  
Class Name: Network  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: string  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: NETWORK\_State\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: A 'snapshot' of a network.  
Definition Source:  
Class Name: Network  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: binary  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: NODE  
Descriptive Name Context: Traffic Simulation  
Definition: A point where two or more links meet. A node specifies connectivity in the network but has no dimension or shape. It is intended that the TSDD's Node will conform as much as possible to the TMDD's Node.  
Definition Source:  
Class Name: Node  
Keywords:  
Related Data Concept:  
Relationship Type:

ASN1 Name:  
ASN1 Data Type:  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: NODE\_IdNumber\_number  
Descriptive Name Context: Traffic Simulation  
Definition: See NODE\_IdNumber\_number in the TMDD: "An unique identification number for Node."  
Definition Source:  
Class Name: Node  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: Integer  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: NODE\_Latitude\_location  
Descriptive Name Context: Traffic Simulation  
Definition: See NODE\_Latitude\_location in the TMDD: "Latitude of Node."  
Definition Source:  
Class Name: Node  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: Integer  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: NODE\_Longitude\_location  
Descriptive Name Context: Traffic Simulation  
Definition: See NODE\_Longitude\_location in the TMDD: "Longitude of Node in microdegrees."

**Definition Source:**  
**Class Name:** Node  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** NODE\_NumLinks\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See NODE\_NumLinks\_quantity in the TMDD: "Number of Links at this Node."  
**Definition Source:**  
**Class Name:** Node  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** NODE\_Status\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** See NODE\_Status\_code in the TMDD: "NODE traffic status or condition."  
**Definition Source:**  
**Class Name:** Node  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Octetstring  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** NODE\_Type\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The code to identify the type of node.  
**Definition Source:** CORSIM Record 177  
**Class Name:** Node  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Regular, 1=Entry, 2=Exit, 3=Entry/Exit, 4=Source, 5=Sink, 6=Source/Sink  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** NODE\_XCoordinate\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The X Coordinate of the node.  
**Definition Source:** CORSIM Record 195  
**Class Name:** Node  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** NODE\_YCoordinate\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The Y Coordinate of the node.  
**Definition Source:** CORSIM Record 195  
**Class Name:** Node  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**

**Internal Layout Minimum Size:**

**Remarks:** Last Change 082799

---

**Descriptive Name:** NORMALLANE  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This is an ordinary lane for carrying traffic in one direction  
**Definition Source:**  
**Class Name:** NormalLane  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** ODP AIR\_DestinationNode\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The destination node number of the ODPair.  
**Definition Source:** CORSIM Record 74  
**Class Name:** ODPair  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** ODP AIR\_ID\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A unique number identifying an Origin-Destination pair.  
**Definition Source:** CORSIM Record 95  
**Class Name:** ODPair  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**

**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** ODPAIR\_OriginNode\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The origin node number.  
**Definition Source:** CORSIM Record 74  
**Class Name:** ODPair  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** ODPAIR\_Percentage\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The percentage of vehicles entering through the origin node.  
**Definition Source:** CORSIM Records 74 and 176  
**Class Name:** ODPair  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** ODPAIR\_Volume\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Volume traveling from the origin node to the destination node.  
**Definition Source:** CORSIM Record 176  
**Class Name:** ODPair  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**

Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: PARKINGZONE\_ExpectedNumManeuvers\_number  
Descriptive Name Context: Traffic Simulation  
Definition: The expected number of parking maneuvers for a specified time period.  
Definition Source: CORSIM Record 56  
Class Name: ParkingZone  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: integer  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: PARKINGZONE\_Length\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The length of the parking zone  
Definition Source: CORSIM Record 56  
Class Name: ParkingZone  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: PARKINGZONE\_Location\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The distance from the downstream stop line to the front of the parking zone.  
Definition Source: CORSIM Record 56  
Class Name: ParkingZone  
Keywords:  
Related Data Concept:  
Relationship Type:



**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PARKINGZONE\_MeanDurationOfManeuvers\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Mean duration of parking maneuver.  
**Definition Source:** CORSIM Record 56  
**Class Name:** ParkingZone  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PASSENGER  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Any rider in a vehicle that is not the driver.  
**Definition Source:**  
**Class Name:** Passenger  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PASSENGERCAR  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A personal vehicle generally used to transport passengers.  
**Definition Source:**  
**Class Name:** PassengerCar

**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PAVEMENTMATERIAL  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The type of pavement used for some part of a roadway.  
**Definition Source:**  
**Class Name:** PavementMaterial  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PAVEMENTMATERIAL\_Condition\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The condition of the pavement.  
**Definition Source:** CORSIM Record 69  
**Class Name:** PavementMaterial  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:** Integer  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Dry, 1=Wet  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PAVEMENTMATERIAL\_FrictionCoefficient\_quantity  
**Descriptive Name Context:** Traffic Simulation

**Definition:** The friction coefficient is used in the computation of maximum speed on a curve.  
**Definition Source:** CORSIM Record 69  
**Class Name:** PavementMaterial  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PAVEMENTMATERIAL\_LagToAccelerate\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The time delay to accelerate.  
**Definition Source:** CORSIM Record 69  
**Class Name:** PavementMaterial  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PAVEMENTMATERIAL\_LagToDecelerate\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The time delay to decelerate.  
**Definition Source:** CORSIM Record 69  
**Class Name:** PavementMaterial  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PAVEMENTMATERIAL\_Type\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The code identifying the pavement type.  
**Definition Source:** CORSIM Record 69  
**Class Name:** PavementMaterial  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Concrete, 1=Asphalt, 3=Other  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PEDESTRIAN  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** An individual traveling on foot.  
**Definition Source:** HCM A-3  
**Class Name:** Pedestrian  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PEDESTRIAN\_ArrivalHeadway\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The arrival headway for pedestirans actuating the push button.  
**Definition Source:** CORSIM Record 48  
**Class Name:** Pedistrian  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**

**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PEDESTRIAN\_ConstantDemandLength\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The length of the pedestrian constant demand period.  
**Definition Source:** CORSIM 48  
**Class Name:** Pedestrian  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PEDESTRIAN\_ConstantDemandStart\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The start time from the beginning of the simulation when pedestrian demand is continuous.  
**Definition Source:** CORSIM 48  
**Class Name:** Pedestrian  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PEDESTRIAN\_DeterministicStart\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Elapsed time from start of simulation to beginning of deterministic arrivals.  
**Definition Source:** CORSIM Record 48  
**Class Name:** Pedestrian  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**

Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: PEDESTRIAN\_Intensity\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The number of pedestrians per hour.  
Definition Source: CORSIM Record 48  
Class Name: Pedestrian  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: PHASE  
Descriptive Name Context: Traffic Simulation  
Definition: The part of the signal cycle allocated to any combination of traffic movements receiving the right-of-way simultaneously during one or more intervals.  
Definition Source: HCM A-4  
Class Name: Phase  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type:  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: PHASE\_ConditionalService\_code  
Descriptive Name Context: Traffic Simulation  
Definition: This code specifies whether the phase can service a left turn twice in the same cycle.  
Definition Source: CORSIM Record 47  
Class Name: Phase  
Keywords:  
Related Data Concept:

**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Can, 1=Cannot  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_DualEntry\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This code specifies whether dual entry is allowed.  
**Definition Source:** CORSIM Record 47  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Allowed, 1=Prohibited  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_ForceOff\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The point in the phase were the controller must terminate the phase to service another phase.  
**Definition Source:** Actuated Controllers in TRAF, 8  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_GapReduction\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The code identifying the method for reducing the gap between vehicles from the

original value to a lesser value over a specified amount of time.  
**Definition Source:** CORSIM Record 47  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Reduce by/reduce every, 1=Reduce by every second, 2=Time to reduce to minimum gap  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_GreenEnd\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The end time for the green part of the phase.  
**Definition Source:** CORSIM  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_GreenStart\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The start time for the green part of the phase.  
**Definition Source:** CORSIM  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799



---

**Descriptive Name:** PHASE\_Lag\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This code designates which phase of a phase pair displays green first.  
**Definition Source:** CORSIM Record 47  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Phase lags the other, 1=Phase leads the other.  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_LagPhaseHold\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This code designates whether a hold can be placed on a phase to prevent the phase from terminating before the force-off point.  
**Definition Source:** CORSIM Record 47  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Cannot, 1=Can  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_MaximumGap\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The gap at the beginning of the reduction period.  
**Definition Source:** CORSIM Record 47  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**

**Internal Representation Layout:**

**Internal Layout Maximum Size:**

**Internal Layout Minimum Size:**

**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_MaximumGreenLength\_quantity

**Descriptive Name Context:** Traffic Simulation

**Definition:** The maximum time that a phase is allowed to display green after receipt of a vehicle call on a conflicting phase.

**Definition Source:** Actuated Controllers in TRAF, 5

**Class Name:** Phase

**Keywords:**

**Related Data Concept:**

**Relationship Type:**

**ASN1 Name:**

**ASN1 Data Type:** float

**Representation Class Term:**

**Value Domain:**

**Valid Value Range:**

**Valid Value List:**

**Valid Value Rule:**

**Internal Representation Layout:**

**Internal Layout Maximum Size:**

**Internal Layout Minimum Size:**

**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_MaximumInitialInterval\_quantity

**Descriptive Name Context:** Traffic Simulation

**Definition:** The maximum green time allowed for the variable initial interval timing.

**Definition Source:** CORSIM Record 47

**Class Name:** Phase

**Keywords:**

**Related Data Concept:**

**Relationship Type:**

**ASN1 Name:**

**ASN1 Data Type:** float

**Representation Class Term:**

**Value Domain:**

**Valid Value Range:**

**Valid Value List:**

**Valid Value Rule:**

**Internal Representation Layout:**

**Internal Layout Maximum Size:**

**Internal Layout Minimum Size:**

**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_MaximumVehicleRecall\_code

**Descriptive Name Context:** Traffic Simulation

**Definition:** This code specifies whether the controller will service maximum green when there is no demand.

**Definition Source:** CORSIM Record 47

**Class Name:** Phase

**Keywords:**

**Related Data Concept:**

**Relationship Type:**

**ASN1 Name:**

**ASN1 Data Type:** Integer

**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Serviced, 1=Not serviced  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_MinimumConditionalServiceTime\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The minimum time that must be available to provide the conditional service phase when a call is issued for the phase.  
**Definition Source:** CORSIM Record 47  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_MinimumGap\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The minimum acceptable vehicle gap.  
**Definition Source:** CORSIM Record 47  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** quantity  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_MinimumGreenLength\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The shortest green time of the phase. If a time setting control is designated as minimum green, the green time shall not be less than that setting. For a fully-actuated controller, the first timed portion of the green interval. It is set considering the number of waiting vehicles between the approach detector and

stopline.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_MinimumInitialInterval\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Once an actuated phase is initiated, it must be in effect for some minimum initial interval regardless of competing CALLs for other phases. At the end of the minimum initial interval, the phase may be terminated if no detector actuations are registered for the current phase and a CALL is received for a subsequent phase. Otherwise, the current phase is extended until its Force-off Point is reached.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_MinimumVehicleRecall\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This code specifies whether the minimum initial interval is recalled when there is no demand.  
**Definition Source:** CORSIM Record 47  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Recalled, 1=Not recalled

**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_Number\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The phase number  
**Definition Source:** CORSIM  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_Overlap\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This code designates whether this phase is one of phase pair defining an overlap.  
**Definition Source:** CORSIM Record 47  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=is one of a phase pair defining overlap, 1=is not one of a phase pair defining overlap.  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_PermissiveEndTime\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** During a permissive period, calls may be answered for phases other than the sync phases. Each permissive period has a Begin and End time.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**

**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_PermissiveStartTime\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** During a permissive period, calls may be answered for phases other than the sync phases. Each permissive period has a Begin and End time.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_RedEnd\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The end time for the red part of the phase.  
**Definition Source:** CORSIM  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_RedLock\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** When red lock is active the controller begins accumulating vehicle actuation for the phase to be used in the calculation of variable initial timing during only the

red portion of the phase.  
**Definition Source:** CORSIM Record 47  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Set, 1=Not set  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_RedRevertTime\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The minimum time that red must be displayed after a yellow.  
**Definition Source:** CORSIM Record 47  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_RedStart\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The start time of the red part of the phase.  
**Definition Source:** CORSIM  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_ReductionTime\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The time over which the initial extension (gap) time will be reduced to a lesser value.  
**Definition Source:** Actuated Controllers in TRAF, 6  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_RestInRed\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This code designates if the controller is allowed to rest in red when there is no demand.  
**Definition Source:** CORSIM Record 47  
**Class Name:** Phaxe  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Allowed, 1=Not Allowed  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_RightTurnOnRed\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Whether a vehicle desiring to turn right at an intersection may do so or not when the light is red. See PHASE\_RightTurnControlType\_code in TMDD.  
**Definition Source:** CORSIM  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=rtor allowed, 1=rtor prohibited



**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_SimultaneousGapOut\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This code specifies whether both rings in a dual ring controller must cross the barrier at the same time.  
**Definition Source:** CORSIM Record 47  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Does, 1=Does not  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_TimeBeforeReduction\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The time from the beginning of the approach phase green until the extension (gap) time starts to be reduced (gap reduction) to some lesser value.  
**Definition Source:** Actuated Controllers in TRAF, 6  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_TotalLength\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The total length of the phase.  
**Definition Source:** CORSIM  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**

**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_VehicleExtensionTime\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The time needed for a vehicle to traverse the distance from the detector to the stop line.  
**Definition Source:** Actuated Controllers in TRAF, 5  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_WalkClearanceLength\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The time it takes for a pedestrian to travel the distance from curb line to curb line.  
**Definition Source:** Actuated Controllers in TRAF, 6  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_WalkLength\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A traffic phase allocated to pedestrian traffic which may provide a right-of-way indication either concurrently with one or more vehicular phases, or to the

exclusion of all vehicular phases.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_YellowEnd\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The end time for the yellow part of the phase.  
**Definition Source:** CORSIM  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_YellowLock\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** If this memory lock toggle is "on" vehicle actuation which occur during the yellow and red display of the signal phase are accumulated and remembered in the controller and used in the variable initial calculation and/or to call the phase for service.  
**Definition Source:** CORSIM Record 47  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Set, 1=Not set  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**

**Internal Layout Minimum Size:**

**Remarks:** Last Change 082799

---

**Descriptive Name:** PHASE\_YellowStart\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The start time of the yellow part of the phase.  
**Definition Source:** CORSIM  
**Class Name:** Phase  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** RAIL  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A heavy vehicle traveling on rails involved in the transport of passengers and or freight on a for-hire, charter, or franchised transit basis.  
**Definition Source:** HCM Implied  
**Class Name:** Rail  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** RAILROAD  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A road consisting of two steel rails.  
**Definition Source:**  
**Class Name:** Railroad  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**

Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: RCTRL\_Initialization\_time  
Descriptive Name Context: Traffic Simulation  
Definition: Maximum initialization time prior to simulation.  
Definition Source: CORSIM  
Class Name: RCTRL  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: Character, Numeric string  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout: MM.mmmm  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: RCTRL\_InitializationPretimedSignalTransistion\_code  
Descriptive Name Context: Traffic Simulation  
Definition: Timing plan transition codes.  
Definition Source: CORSIM  
Class Name: RCTRL  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type:  
Representation Class Term:  
Value Domain:  
Valid Value Range: 1=Immediate Transition, 2=Two-cycle Transition, 3=Three-cycle Transition  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: RCTRL\_InitializationRandomSeed\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: Random number seed  
Definition Source: CORSIM  
Class Name: RCTRL  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float

**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** RCTRL\_TimeIntervalDuration\_time  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Duration of the time interval.  
**Definition Source:**  
**Class Name:** RCTRL  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Character, A8 string  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:** SSSSSSSS  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799For a time period, the sum of the interval durations should equal the time period duration.

---

**Descriptive Name:** RCTRL\_TimeIntervalID\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Time Interval Number  
**Definition Source:**  
**Class Name:** RCTRL  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Number, I2 integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** RCTRL\_TimePeriodDuration\_time  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Duration of the time period.  
**Definition Source:**  
**Class Name:** RCTRL  
**Keywords:**

**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Character, A8 string  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:** SSSSSSSS  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** RCTRL\_TimePeriodID\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Time Period Number  
**Definition Source:**  
**Class Name:** RCTRL  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Number, I2 integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** RECREATIONALTRAILER  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A non-motorized recreational vehicle that is towed by a motorized vehicle.  
**Definition Source:**  
**Class Name:** RecreationalTrailer  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** RECREATIONVEHICLE  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A vehicle whose primary purpose is recreation

**Definition Source:**  
**Class Name:** RecreationVehicle  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** REGULATORYSIGN  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Any sign used to controll traffic or pedestrians.  
**Definition Source:**  
**Class Name:** RegulatorySign  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** ROAD  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A collection of links, which may or may not be contiguous, sharing the same street name or highway number.  
**Definition Source:**  
**Class Name:** Road  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---



**Descriptive Name:** SCENARIO  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A specific configuration of a simulation.  
**Definition Source:**  
**Class Name:** Scenario  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** SCENARIO\_AgencyName\_text  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The name of the agency creating this scenario.  
**Definition Source:**  
**Class Name:** Scenario  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** string  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** SCENARIO\_CreationDate\_date  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The scenario creation date.  
**Definition Source:**  
**Class Name:** Scenario  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Character, A8 string  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:** MMDDYYYY  
**Internal Layout Maximum Size:**

**Internal Layout Minimum Size:**

**Remarks:** Last Change 082799

---

**Descriptive Name:** SCENARIO\_SimulationID\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The ID number of the simulation.  
**Definition Source:**  
**Class Name:** Scenario  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** SCENARIO\_UserName\_text  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The name of the user creating this scenario.  
**Definition Source:**  
**Class Name:** Scenario  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** string  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** SEGMENT  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A segment is layered on a link or opposing pair of links to provide more detailed geometric information for accurate microscopic simulation and graphical display.  
**Definition Source:**  
**Class Name:** Segment  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**

Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: SHOULDER  
Descriptive Name Context: Traffic Simulation  
Definition: A non-driving lane attached to the right side of a road. It is generally intended as a relatively reliable area to leave the road.  
Definition Source:  
Class Name: Shoulder  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type:  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: SIGN  
Descriptive Name Context: Traffic Simulation  
Definition: An informational, directional or regulatory sign placed along a Segment.  
(Contrasted with ControlSign, which is conceptually a type of Signal controlling an Intersection).  
Definition Source:  
Class Name: Sign  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type:  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: SIGNAL  
Descriptive Name Context: Traffic Simulation  
Definition: Any display that employs lights, motion or sound to control traffic or pedestrians.  
Definition Source:  
Class Name: Signal

**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** SIGNALHARDWARE  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Any of the hardware used for traffic signals.  
**Definition Source:**  
**Class Name:** SignalHardware  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** SIGNALINTERVAL  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The permissive time interval given to each approach of a fixed time controlled intersection.  
**Definition Source:**  
**Class Name:** SignalInterval  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** SIGNALINTERVAL\_ControlCode\_code

**Descriptive Name Context:** Traffic Simulation  
**Definition:** The control code for a signal interval for an approach to an intersection.  
**Definition Source:** CORSIM  
**Class Name:** SignalInterval  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=amber/yield, 1=green ball, 2=red ball, 3=red w/ right green arrow, 4=red w/ left green arrow, 5=stop sign, 6=red w/ green diagonal, 7=green through w/ no turns, 8=green arrows w/ no through, 9=green through and right w/ no left turn.  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799Multiple instantiations

---

**Descriptive Name:** SIGNALINTERVAL\_Duration\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The duration of a fixed time controller signal interval  
**Definition Source:** CORSIM  
**Class Name:** SignalInterval  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:** SSSS.ssss  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799Multiple instantiations

---

**Descriptive Name:** SIGNALPEDESTRIAN  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** An intersection control signal used to control pedestrian movement.  
**Definition Source:**  
**Class Name:** SignalPedestrian  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**

**Internal Layout Minimum Size:**

**Remarks:** Last Change 082799

---

**Descriptive Name:** SINGLEUNITTRUCK  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A truck whose cab (tractor) and load bed (trailer) comprise a single entity.  
**Definition Source:**  
**Class Name:** SingleUnitTruck  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** SURVEILLANCE  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Any procedure or system used to monitor traffic.  
**Definition Source:**  
**Class Name:** Surveillance  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TIMINGPLAN  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The timing plan for a fixed time controller.  
**Definition Source:**  
**Class Name:** TimingPlan  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**

**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TIMINGPLAN\_ConditionalService\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This code determines is a left turn phase can be serviced twice during the controllers background cycle length if the time remaining in the cycle is greater than a user specified time.  
**Definition Source:** Actuated Controllers in TRAF  
**Class Name:** TimingPlan  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=enable, 1=disable  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TIMINGPLAN\_CoordinationLength\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The time during phase 2 green before T0 that is allowed for system coordination.  
**Definition Source:** Actuated Controllers in TRAF  
**Class Name:** TimingPlan  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TIMINGPLAN\_DualEntryOperation\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** In dual ring operation, this code indicates if in the absence of a call on a compatible phase in the opposite ring if the partner phase will also display green.  
**Definition Source:** Actuated Controllers in TRAF  
**Class Name:** TimingPlan  
**Keywords:**

**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=enable, 1=disable  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TIMINGPLAN\_LastCarPassage\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This code determines that if gap reduction has been initiated and the phase gaps-out, the last vehicle crossing the detector before the gap-out will receive the initial or full extension time.  
**Definition Source:** Actuated Controllers in TRAF, 6  
**Class Name:** TimingPlan  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=enable, 1=disable  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TIMINGPLAN\_LocalCycleLength\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The length of one timing cycle for a controller.  
**Definition Source:** Actuated Controllers in TRAF  
**Class Name:** Timingplan  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TIMINGPLAN\_LocalT0\_quantity



**Descriptive Name Context:** Traffic Simulation  
**Definition:** The time of T0 in system time.  
**Definition Source:** Actuated Controllers in TRAF  
**Class Name:** Timingplan  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TIMINGPLAN\_MinimumGap\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The minimum acceptable gap allowed.  
**Definition Source:** Actuated Controllers in TRAF  
**Class Name:** TimingPlan  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TIMINGPLAN\_Node\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The node/intersection identifier for the timing plan.  
**Definition Source:** Actuated Controllers in TRAF  
**Class Name:** TimingPlan  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=immediate, 1=two-cycle, 2=three-cycle  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TIMINGPLAN\_Offset\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The time relationship expressed in seconds or percent of cycle length, determined by the difference between a defined interval portion of the coordinated phase green and a system reference point.  
**Definition Source:** FHWA Control Systems Glossary  
**Class Name:** TimingPlan  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TIMINGPLAN\_SimultaneousGapOut\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** In dual ring operation, this code determines if the controller will service another phase if both active phases are not in gap-out or max-out mode.  
**Definition Source:** Actuated Controllers in TRAF  
**Class Name:** TimingPlan  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=enable, 1=disable  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TIMINGPLAN\_SystemCycleLength\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The background cycle length. The time from the beginning of main street green through all the phases back to the beginning of main street green.  
**Definition Source:** Actuated Controllers in TRAF  
**Class Name:** Timingplan  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**

Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: TIMINGPLAN\_Transition\_code  
Descriptive Name Context: Traffic Simulation  
Definition: The timing plan transition type for a fixed time controller.  
Definition Source: Actuated Controllers in TRAF  
Class Name: TimingPlan  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type:  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List: 0=immediate, 1=two-cycle, 2=three-cycle  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: TIMINGPLAN\_YieldInterval\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: This is the only period of time during the cycle when phase 1 may be terminated.  
Definition Source: FHWA Control Systems Glossary  
Class Name: TimingPlan  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: TIMINGPLAN\_YieldPoint\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The Yield Point begins a period of time known as the Yield Interval. This is the only period of time during the cycle when phase 1 may be terminated.  
Definition Source: FHWA Control Systems Glossary  
Class Name: TimingPlan  
Keywords:  
Related Data Concept:

Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: TRAFFICASSIGNMENT\_AcceptableThreshold\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The assignment process terminates when the maximum number of iterations is reached, or when the relative change of the objective function between two successive iterations is less or equal to the threshold value (Epsilon), whichever occurs first.  
Definition Source: CORSIM Record 175  
Class Name: TrafficAssignment  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: TRAFFICASSIGNMENT\_AccuracyThreshold\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The line-search accuracy threshold.  
Definition Source: CORSIM Record 175  
Class Name: TrafficAssignment  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: TRAFFICASSIGNMENT\_AllOrNothingPercentage\_quantity

**Descriptive Name Context:** Traffic Simulation  
**Definition:** Percentage of the impedances produced by an all-or-nothing network loading that will be incorporated in the first assignment iteration.  
**Definition Source:** CORSIM Record 175  
**Class Name:** TrafficAssignment  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRAFFICASSIGNMENT\_CapacityIterations\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Number of capacity iterations to be applied.  
**Definition Source:** CORSIM Record 175  
**Class Name:** TrafficAssignment  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRAFFICASSIGNMENT\_CapacitySmoothingPercentage\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Capacity smoothing factor to be applied if more than one capacity adjustment iteration is requested.  
**Definition Source:** CORSIM Record 175  
**Class Name:** TrafficAssignment  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**

**Internal Layout Minimum Size:**

**Remarks:** Last Change 082799

---

**Descriptive Name:** TRAFFICASSIGNMENT\_DavidsonRatio\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Ratio of the service discharge rate to the saturation rate.  
**Definition Source:** CORSIM Record 175  
**Class Name:** TrafficAssignment  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRAFFICASSIGNMENT\_ID\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This will uniquely identify a set of assignment parameters.  
**Definition Source:** CORSIM Record 175  
**Class Name:** TrafficAssignment  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRAFFICASSIGNMENT\_ImpedanceFunction\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This code identifies the impedance function used.  
**Definition Source:** CORSIM Record 175  
**Class Name:** TrafficAssignment  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=FHWA impedance function, 1=Modified Davidson impedance function,

Valid Value Rule: 2=other function  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: TRAFFICASSIGNMENT\_MaximumIterations\_number  
Descriptive Name Context: Traffic Simulation  
Definition: The assignment process terminates when the maximum number of iterations is reached, or when the relative change of the objective function between two successive iterations is less or equal to the threshold value (Epsilon), whichever occurs first.  
Definition Source: CORSIM Record 175  
Class Name: TrafficAssignment  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: TRAFFICASSIGNMENT\_OptimalityType\_code  
Descriptive Name Context: Traffic Simulation  
Definition: This code identifies which optimization to use.  
Definition Source: CORSIM Record 175  
Class Name: TrafficAssignment  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: Integer  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List: 0=User's optimal assignment, 1=System's optimal assignment  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: TRAFFICASSIGNMENT\_ParameterA\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: This item assumes the CORSIM assignment function. The first parameter for the impedance function.  
Definition Source: CORSIM Record 175  
Class Name: TrafficAssignment  
Keywords:

**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRAFFICASSIGNMENT\_ParameterB\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This item assumes the CORSIM assignment function. The second parameter for the impedance function.  
**Definition Source:** CORSIM Record 175  
**Class Name:** TrafficAssignment  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRAFFICCONTROL  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Any signal device used to control traffic.  
**Definition Source:**  
**Class Name:** TrafficControl  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRANSIT  
**Descriptive Name Context:** Traffic Simulation



**Definition:** Public Transportation  
**Definition Source:**  
**Class Name:** Transit  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRANSIT\_DwellTimePercentage\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The factor by which the mean dwell time is multiplied to compute the actual dwell time that the transit unit spends servicing passenger at an individual stop.  
**Definition Source:** CORSIM Record 150  
**Class Name:** Transit  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRANSITROUTE\_DownstreamNode\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The downstream node number.  
**Definition Source:** CORSIM Record 187  
**Class Name:** TransitRoute  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRANSITROUTE\_ID\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This number uniquely identifies the transit route.  
**Definition Source:** CORSIM Record 187  
**Class Name:** TransitRoute  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRANSITROUTE\_MeanHeadway\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The mean headway between transit vehicles on this route.  
**Definition Source:** CORSIM Record 189  
**Class Name:** TransitRoute  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRANSITROUTE\_Offset\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** An offset time at which a transit vehicle is emitted onto the route.  
**Definition Source:** CORSIM Record 188  
**Class Name:** TransitRoute  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**

**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRANSITROUTE\_StationID\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The transit route station ID.  
**Definition Source:** CORSIM Record 188  
**Class Name:** Transit Route  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRANSITROUTE\_UpstreamNode\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The upstream node number.  
**Definition Source:** CORSIM Record 187  
**Class Name:** TransitRoute  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRANSITSTATION\_Distance\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The distance from the downstream end of the transit stop to the downstream stop bar.  
**Definition Source:** CORSIM Record 185  
**Class Name:** TransitStation  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**

Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: TRANSITSTATION\_DownstreamNode\_number  
Descriptive Name Context: Traffic Simulation  
Definition: The nearest downstream node number.  
Definition Source: CORSIM Record 185  
Class Name: TransitStation  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: integer  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: TRANSITSTATION\_ID\_number  
Descriptive Name Context: Traffic Simulation  
Definition: This number uniquely identifies the transit station.  
Definition Source: CORSIM Record 185  
Class Name: TransitStation  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: integer  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: TRANSITSTATION\_MaximumTransitVehicles\_number  
Descriptive Name Context: Traffic Simulation  
Definition: The maximum number of transit vehicles the station can hold at one time.  
Definition Source: CORSIM Record 185  
Class Name: TransitStation  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:

**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRANSITSTATION\_MeanDwellTime\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The mean dwell time for transit vehicles to load and unload passengers at this station.  
**Definition Source:** CORSIM Record 186  
**Class Name:** TransitStation  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRANSITSTATION\_Protected\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This code indicates whether the transit stop is protected or not. For example, the stop may be a turnout and does not block traffic.  
**Definition Source:** CORSIM Record 185  
**Class Name:** TransitStation  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Protected, 1=Unprotected  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRANSITSTATION\_ServicePercentage\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Percentage of transit vehicles servicing this station that do not stop due to lack of demand.

**Definition Source:** CORSIM Record 186  
**Class Name:** TransitStation  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRANSITSTATION\_Type\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This code identifies the transit station type.  
**Definition Source:** CORSIM Record 150  
**Class Name:** Transit  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRANSITSTATION\_UpstreamNode\_number  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The nearest upstream node number.  
**Definition Source:** CORSIM Record 185  
**Class Name:** TransitStation  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TRUCK  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A vehicle use to transport freight.  
**Definition Source:**  
**Class Name:** Truck  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TWOLANEHIGHWAY  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** A roadway having a two-lane cross section with one lane for each direction of flow, on which passing maneuvers must be made in the opposing lane.  
**Definition Source:** HCM A-5  
**Class Name:** TwoLaneHighway  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** TWOWAYLEFTTURNLANE  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The center lane on a three-lane or multilane highway which is used continuously for vehicles turning left in either direction of flow at midblock locations.  
**Definition Source:** HCM A-5  
**Class Name:** TwoWayLeftTurnLane  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**

Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: USER  
Descriptive Name Context: Traffic Simulation  
Definition: Any driver, passenger or pedestrian who uses a road.  
Definition Source:  
Class Name: User  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type:  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: VARIABLEDISPLAY  
Descriptive Name Context: Traffic Simulation  
Definition: A type of display hardware which can change in response to changing conditions on the road. An example would be changeable message signs.  
Definition Source:  
Class Name: VariableDisplay  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type:  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: VEHICLE  
Descriptive Name Context: Traffic Simulation  
Definition: Any powered device use to convey passengers or freight on a road.  
Definition Source:  
Class Name: Vehicle  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type:  
Representation Class Term:  
Value Domain:



Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: VEHICLE\_Acceleration\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The acceleration of a vehicle at a given instant.  
Definition Source: CORSIM  
Class Name: Vehicle  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: VEHICLE\_AccelerationMaximum\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The maximum acceleration of a vehicle on a level road.  
Definition Source: CORSIM  
Class Name: Vehicle  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:  
ASN1 Data Type: float  
Representation Class Term:  
Value Domain:  
Valid Value Range:  
Valid Value List:  
Valid Value Rule:  
Internal Representation Layout:  
Internal Layout Maximum Size:  
Internal Layout Minimum Size:  
Remarks: Last Change 082799

---

Descriptive Name: VEHICLE\_DecelerationMaximum\_quantity  
Descriptive Name Context: Traffic Simulation  
Definition: The maximum deceleration allowed on level grade and dry pavement.  
Definition Source: CORSIM Record 71  
Class Name: Vehicle  
Keywords:  
Related Data Concept:  
Relationship Type:  
ASN1 Name:

**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** VEHICLE\_Height\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The height of a vehicle.  
**Definition Source:** CORSIM  
**Class Name:** Vehicle  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** VEHICLE\_Length\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The length of a vehicle.  
**Definition Source:** CORSIM  
**Class Name:** Vehicle  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** VEHICLE\_LoadWeight\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The weight of cargo and occupants carried by a vehicle.  
**Definition Source:** CORSIM  
**Class Name:** Vehicle  
**Keywords:**

**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** VEHICLE\_LoadWeightMaximumRecommended\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The recommended maximum cargo weight for a vehicle.  
**Definition Source:** CORSIM  
**Class Name:** Vehicle  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** VEHICLE\_NonEmergencyMaximumDeceleration\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The largest value of deceleration that is allowed for car following.  
**Definition Source:** CORSIM Record 70  
**Class Name:** Vehicle  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** VEHICLE\_Occupancy\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The number of people, including the driver, inside a vehicle.

**Definition Source:** CORSIM  
**Class Name:** Vehicle  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** VEHICLE\_OccupancyMaximum\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The maximum number of people, including the driver, that should be carried in a particular vehicle.  
**Definition Source:** CORSIM  
**Class Name:** Vehicle  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** VEHICLE\_PowerMaximum\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The maximum power produced by a vehicle's engine.  
**Definition Source:** CORSIM  
**Class Name:** Vehicle  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** VEHICLE\_ProjectedFrontalArea\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The area of a vehicle's silhouette projected onto a vertical plane in front of the vehicle. (Influences drag characteristics.)  
**Definition Source:** CORSIM  
**Class Name:** Vehicle  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** VEHICLE\_Speed\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The speed of a vehicle at a given instant.  
**Definition Source:** CORSIM  
**Class Name:** Vehicle  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** VEHICLE\_SpeedMaximum\_quantity  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** The maximum speed of a vehicle on a level road.  
**Definition Source:** CORSIM  
**Class Name:** Vehicle  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** float  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**

**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** VEHICLE\_Type\_code  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** This code identifies the vehicle type.  
**Definition Source:** AASHTO  
**Class Name:** Vehicle  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:** Integer  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:** 0=Passenger car, 1=Single unit truck, 2=single unit bus, 3=Articulated bus, 4=intermediate semitrailer truck, 5=large semitrailer truck, 6=double bottom semitrailer, 7=interstate 14.6m semitrailer, 8=interstate 16.2m semitrailer, 9=triple semitrailer, 10=turnpike double semitrailer, 11=RV motor home, 12=RV car and camper trailer, 13=RV car and boat trailer, 14=RV motor home and boat trailer  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

**Descriptive Name:** WARNINGSIGN  
**Descriptive Name Context:** Traffic Simulation  
**Definition:** Any sign used to warn motorists or pedestrian of a hazard or impediment to traffid  
**Definition Source:** Traffic Engineering, McShane, et al  
**Class Name:** WarningSign  
**Keywords:**  
**Related Data Concept:**  
**Relationship Type:**  
**ASN1 Name:**  
**ASN1 Data Type:**  
**Representation Class Term:**  
**Value Domain:**  
**Valid Value Range:**  
**Valid Value List:**  
**Valid Value Rule:**  
**Internal Representation Layout:**  
**Internal Layout Maximum Size:**  
**Internal Layout Minimum Size:**  
**Remarks:** Last Change 082799

---

## Object Model

### *Unified Modeling Language*

The object model is presented in this section by means of Unified Modeling Language (UML) class diagrams. A brief description of UML diagrams and terms is given in the appendix.

If the entire model were to be presented on a single page, with every class and relation drawn, the diagram would be too complex to be meaningful. Hence, each diagram is a filtered view intended to emphasize some aspect of the model. The diagrams are to the model as an architect's drawings are to a building – there may be a wiring diagram, a plumbing diagram, front and side elevations, perspective views, etc., all showing different aspects of the same building. Thus a class may appear in more than one diagram, perhaps showing different relations for the class, but each diagram is referring to the same class.

The first diagram presents the highest-level view of the object model. In this case, a very high level view of a generic traffic simulation. Since our interest is the Database Package, subsequent pages show different views related to the database.

Associated with each class are its attributes. Some classes have a few or no attributes while other classes have a large number of attributes. . There isn't enough room on a page sometimes to show the attributes. It's for this reason that some of the diagrams show the class attributes and others do not. However, the classes and attributes are listed with their definitions in the Class Dictionary table and Attribute Dictionary table following the diagrams. The classes and attributes can also be seen in the TSDD in the preceeding section. The naming format is:

CLASSNAME\_AttributeName\_datatype or  
"MOE"\_ClassName\_AttributeName\_datatype or  
"CLASSNAME"



## ***Diagrams***

The following is a list of the UML diagrams:

- Top Level – Generic Traffic Simulation
- Database Package
- Facilities Generalization
- Displays Generalization
- Vehicles Generalization
- Users Generalization
- Lane Generalization
- Event Generalization
- Surveillance Generalization
- Network Geometry View
- Fixed Time Controller View
- Actuated Controller View
- Vehicle View
- Driver View
- Transit View
- Application View
- Environment Subpackage

Figure 1 - Top Level

## Top Level - Generic Traffic Simulation

### Logical View

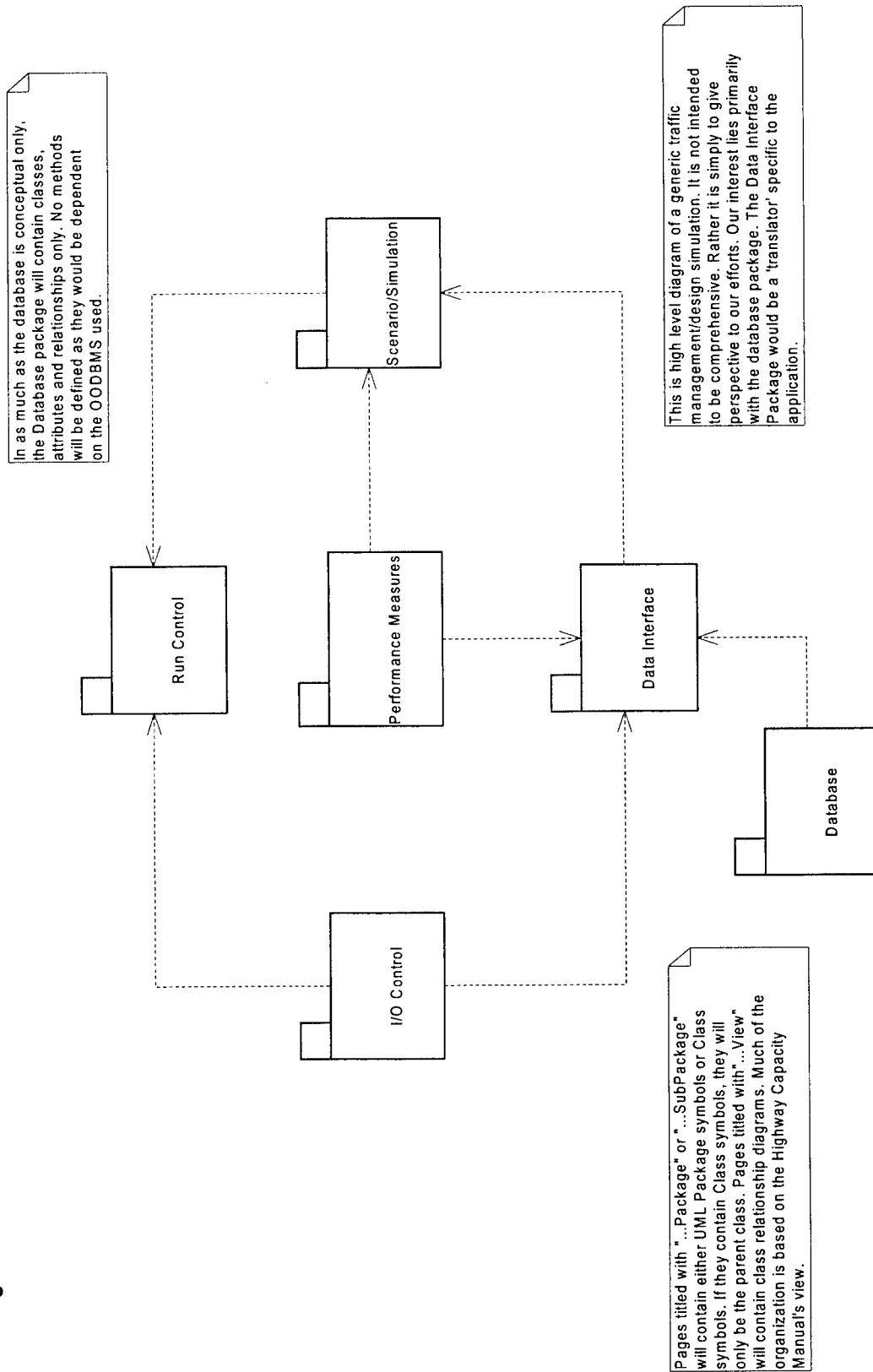


Figure 2 - Database Package

## Database Package

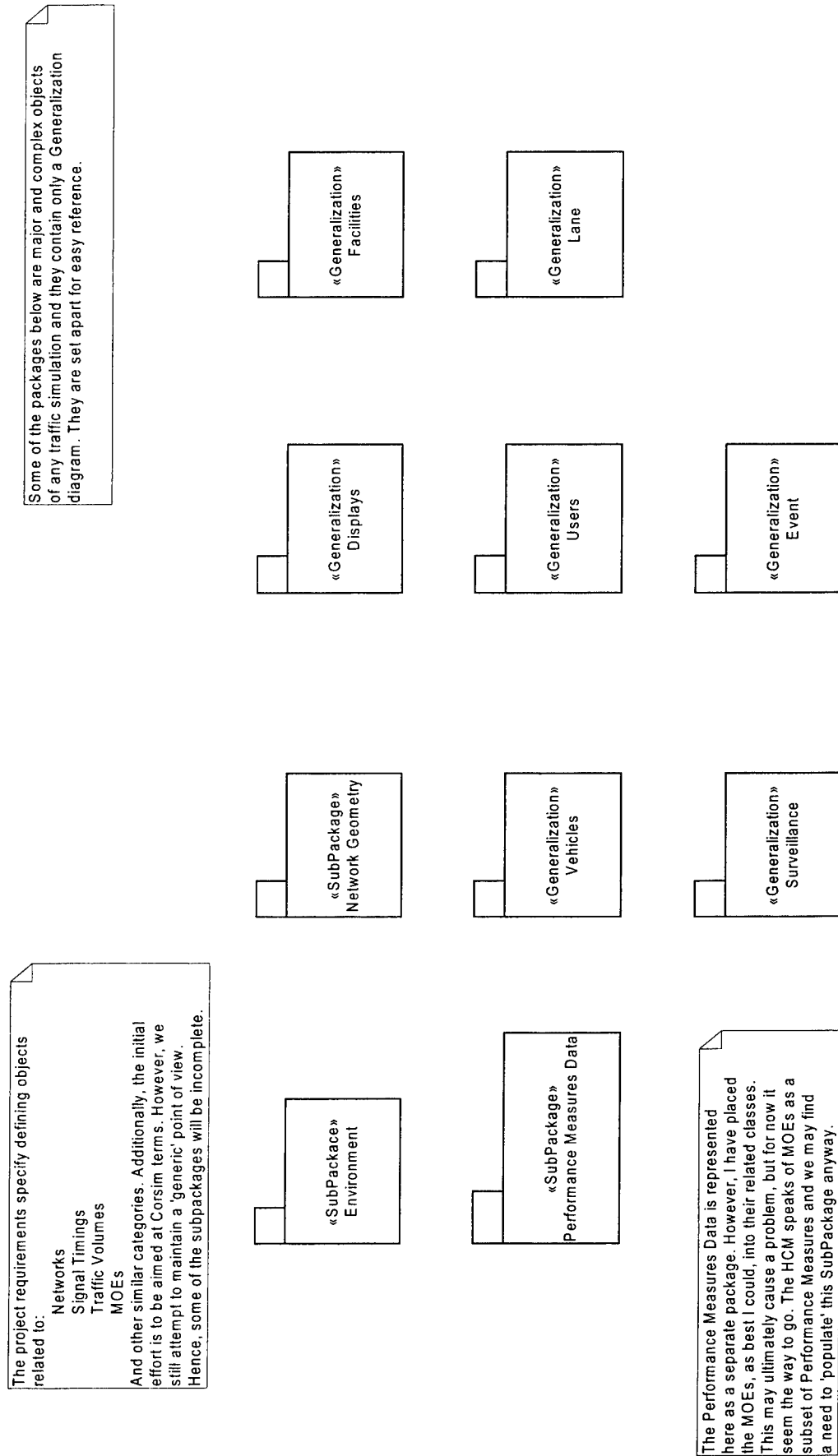


Figure 3 - Facilities Generalization

## Database: Facilities Generalization

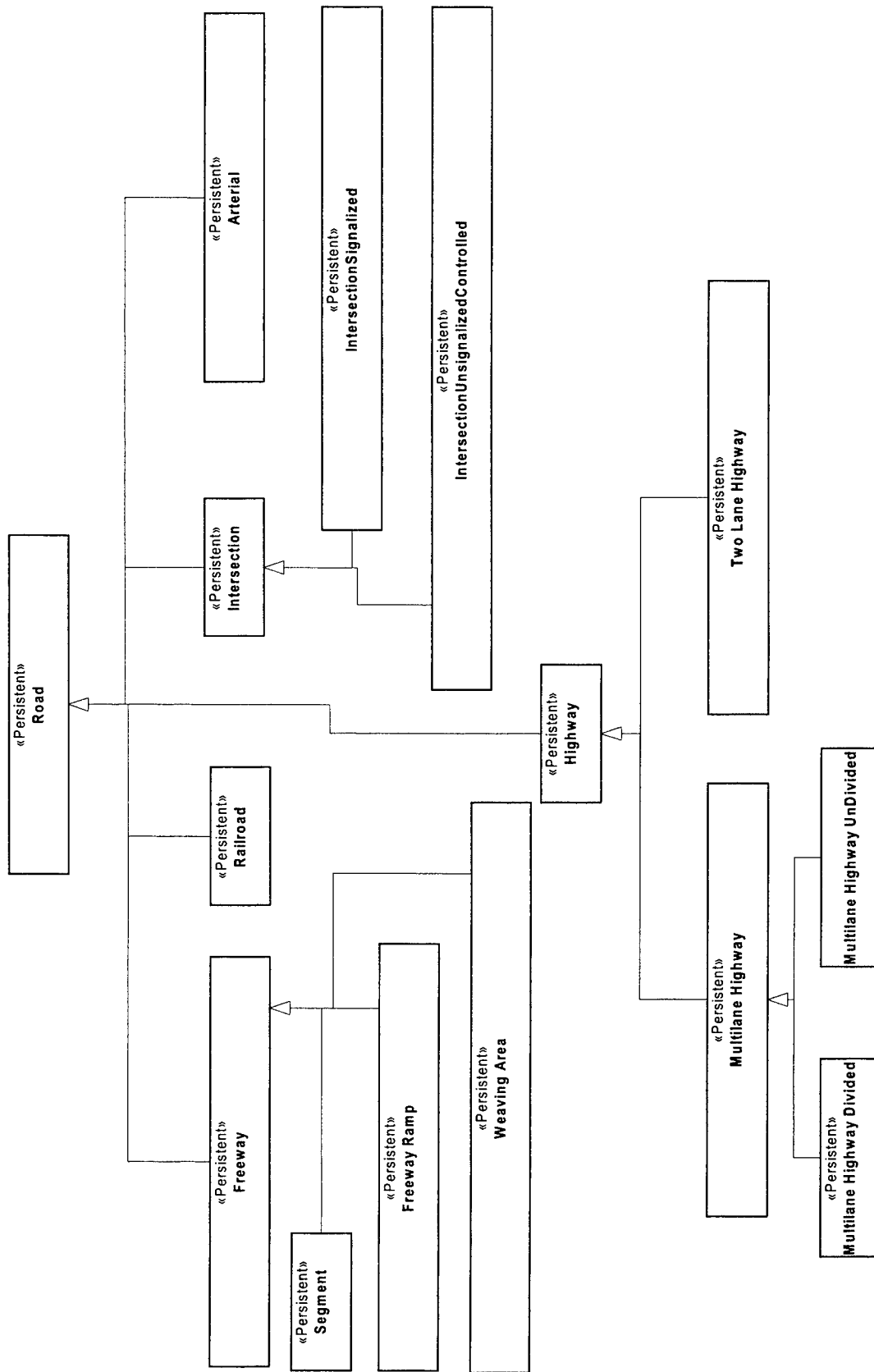


Figure 4 - Displays Generalization

## Database: Displays Generalization

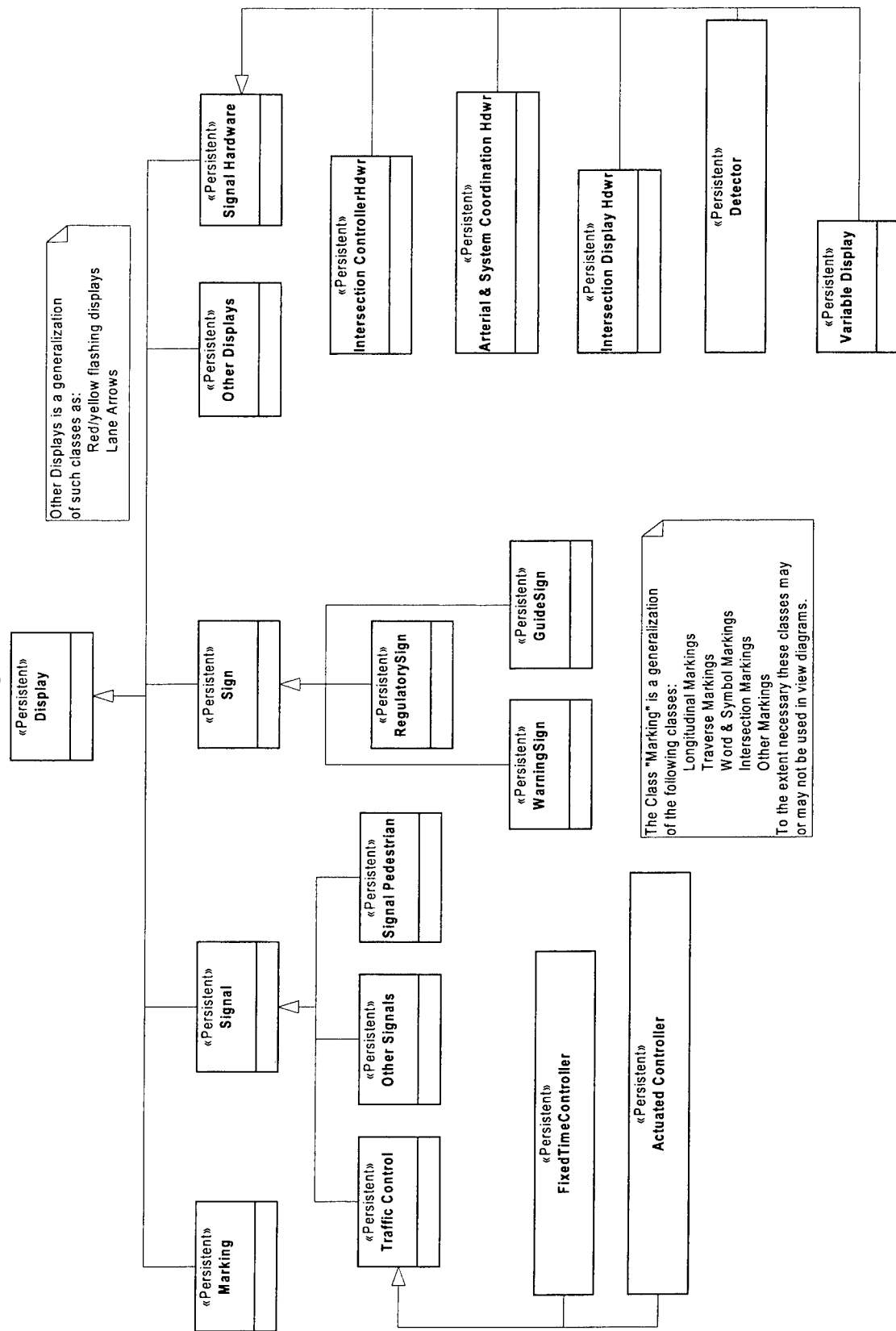


Figure 5 - Vehicles Generalization

## Database: Vehicles Generalization

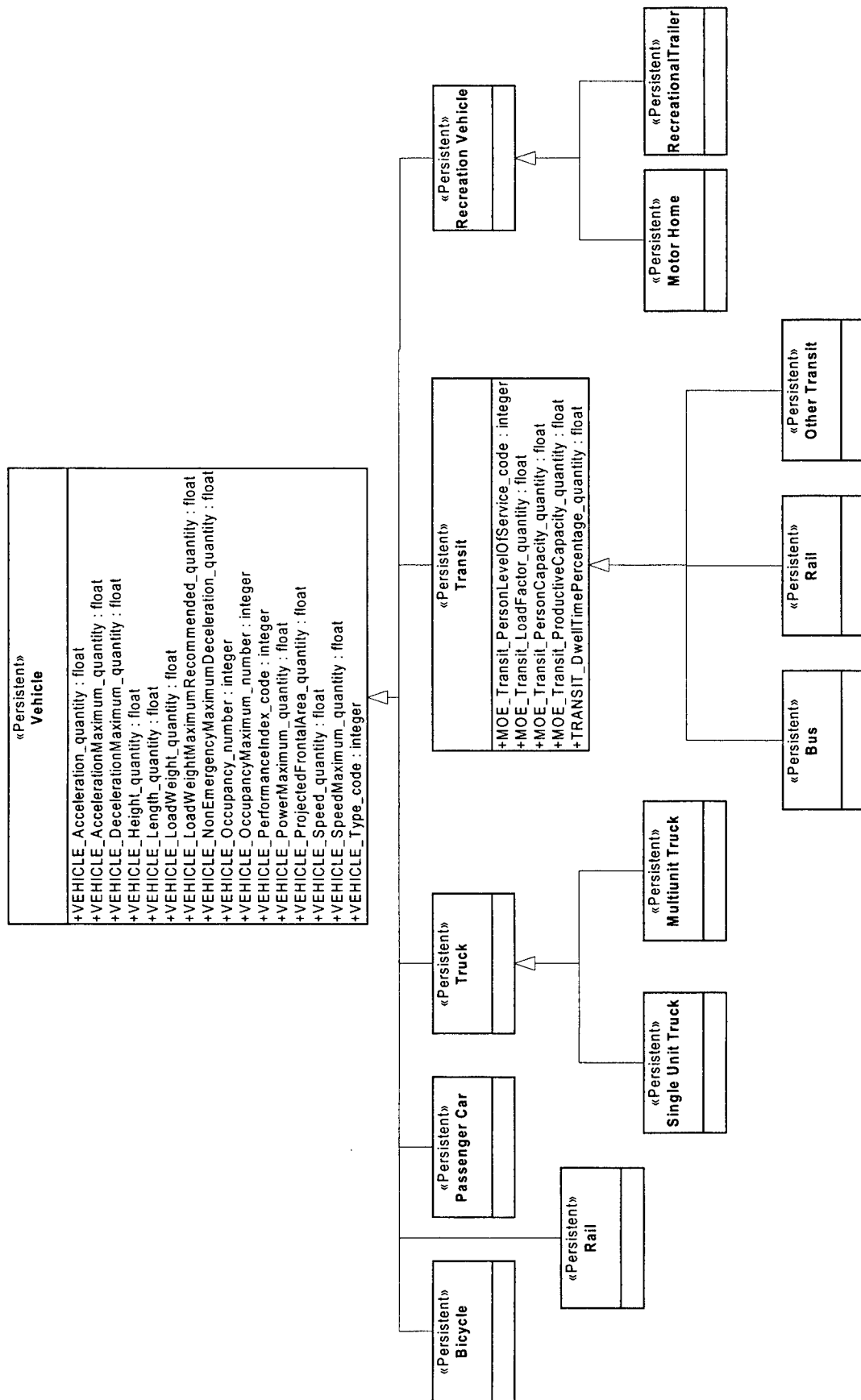


Figure 6 - Users Generalization

## Database: Users Generalization

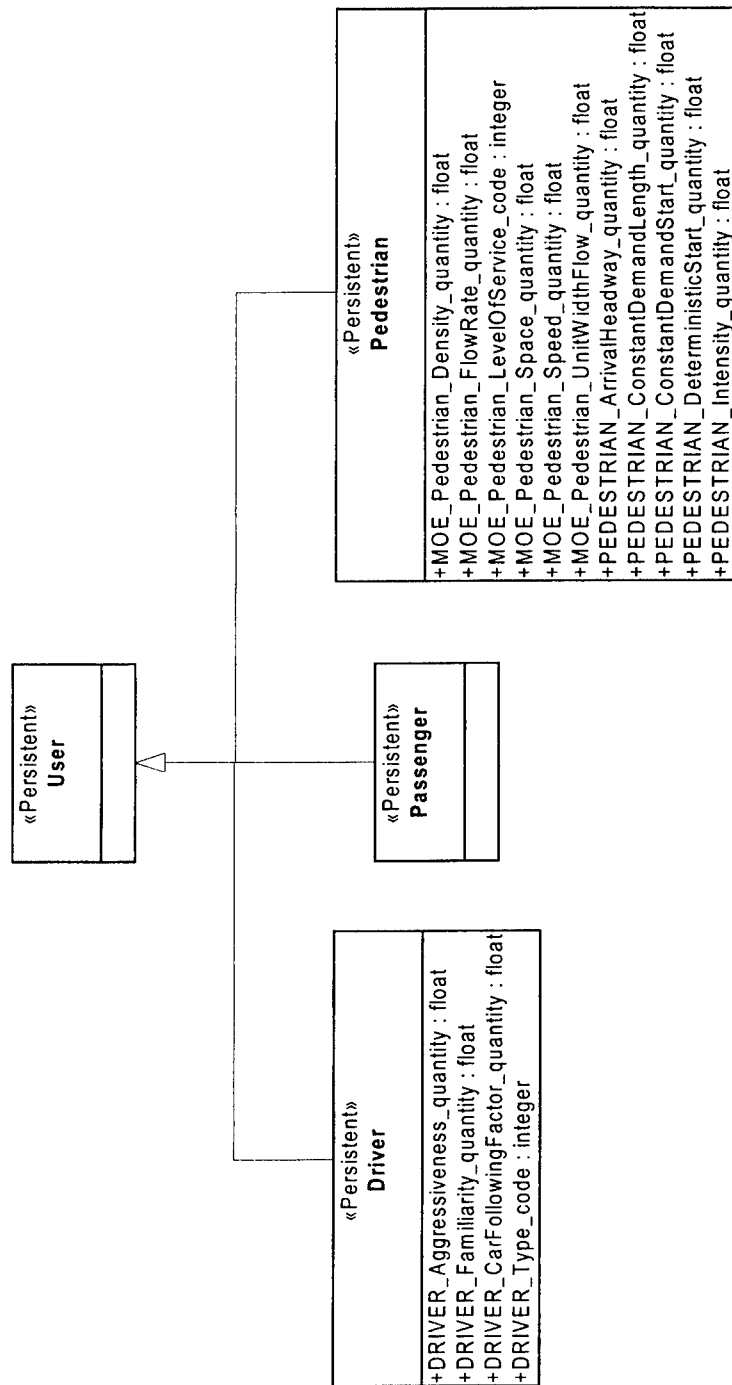


Figure 7 - Lanes Generalization

## Database: Lane Generalization

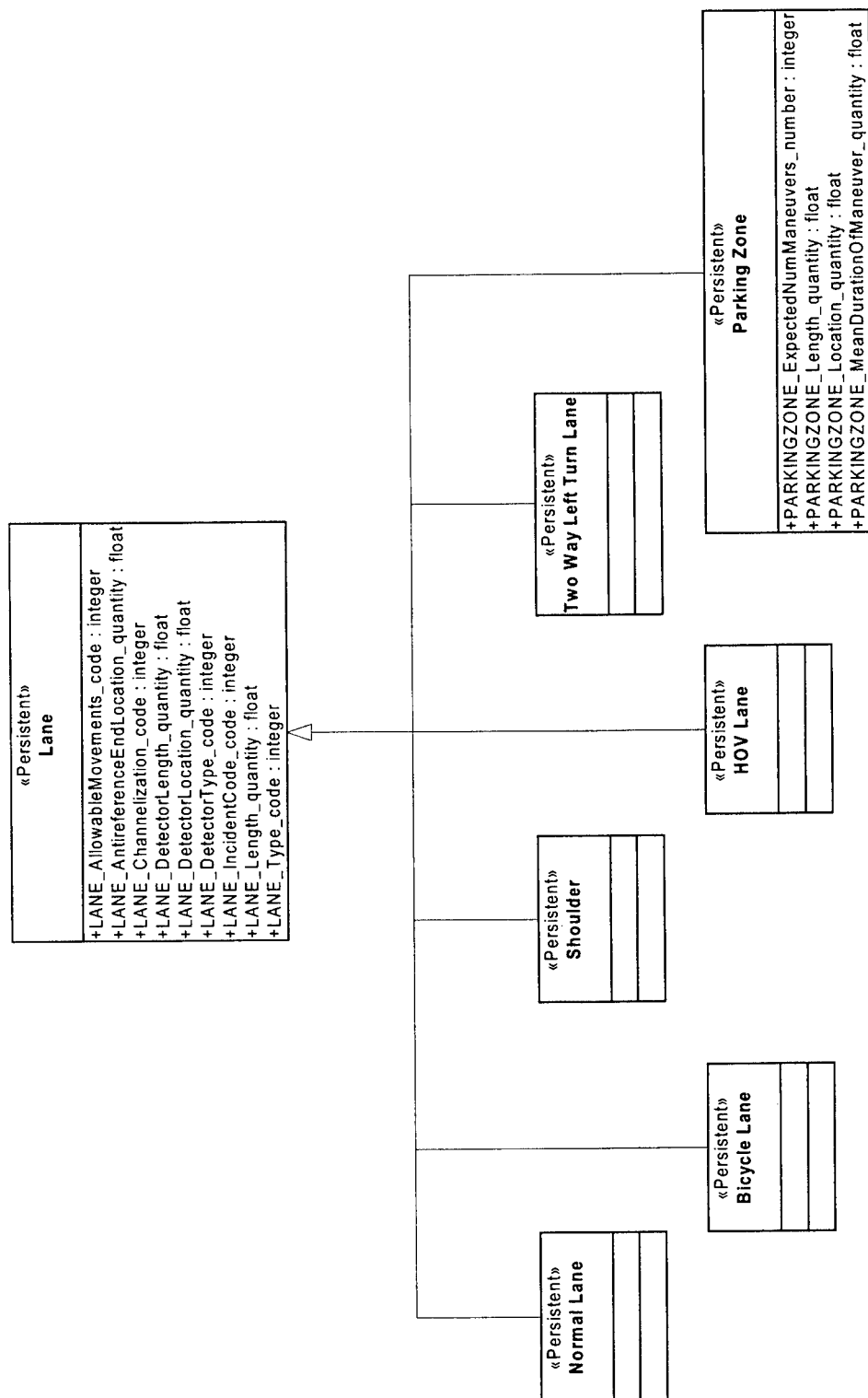




Figure 8 - Event Generalization

## Database: Event Generalization

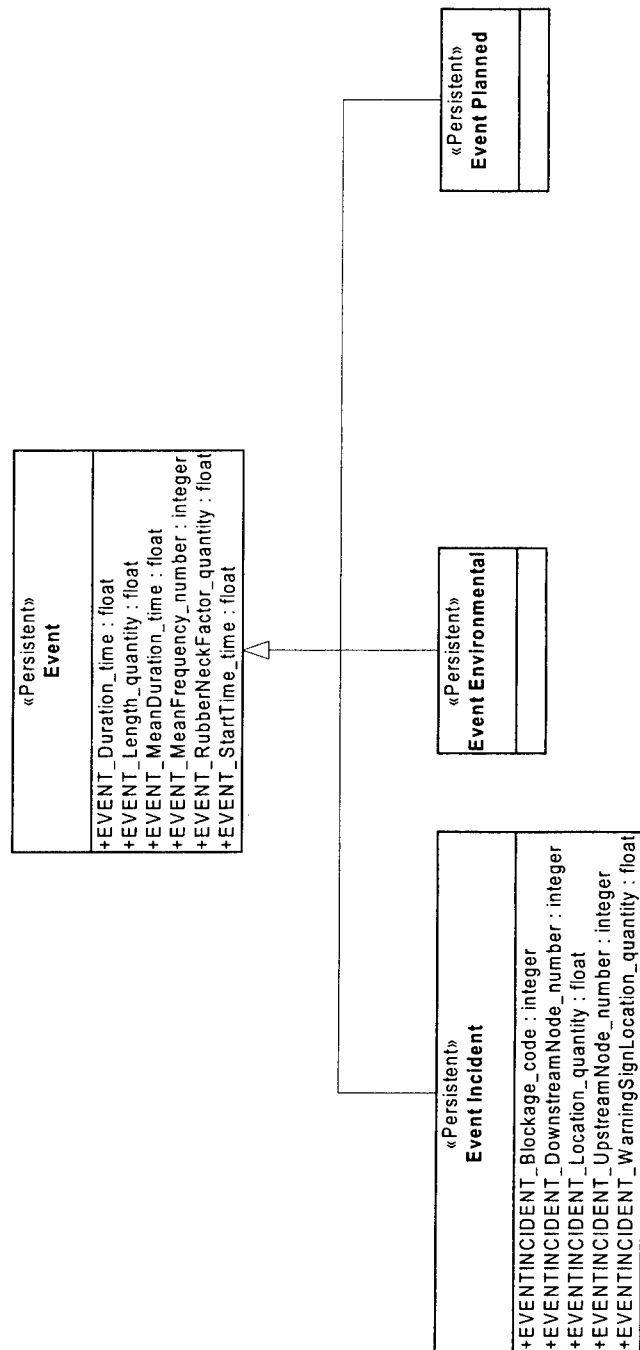


Figure 9 - Surveillance Generalization

## Database: Surveillance Generalization

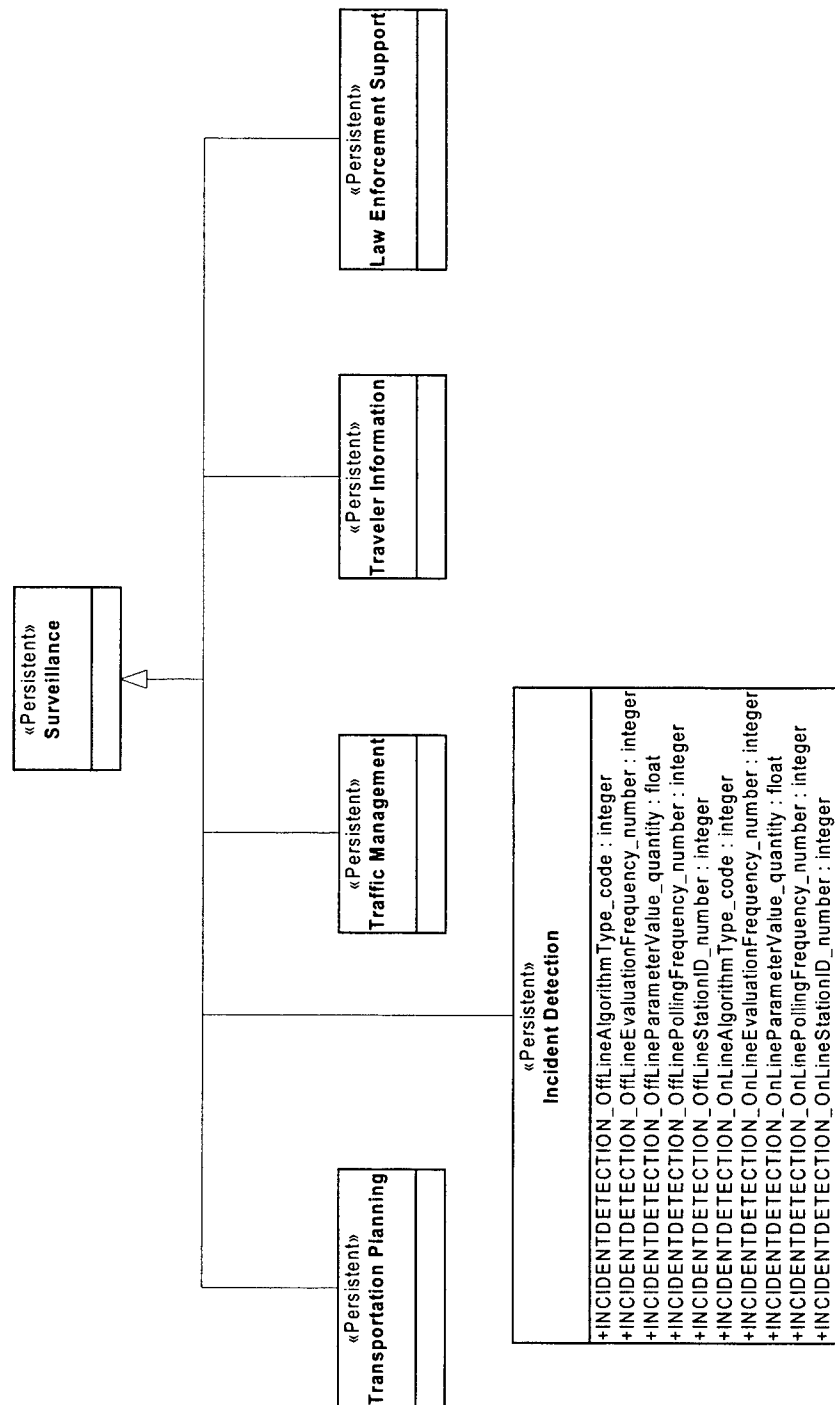


Figure 10 - Network Geometry View

## Database: Network Geometry View

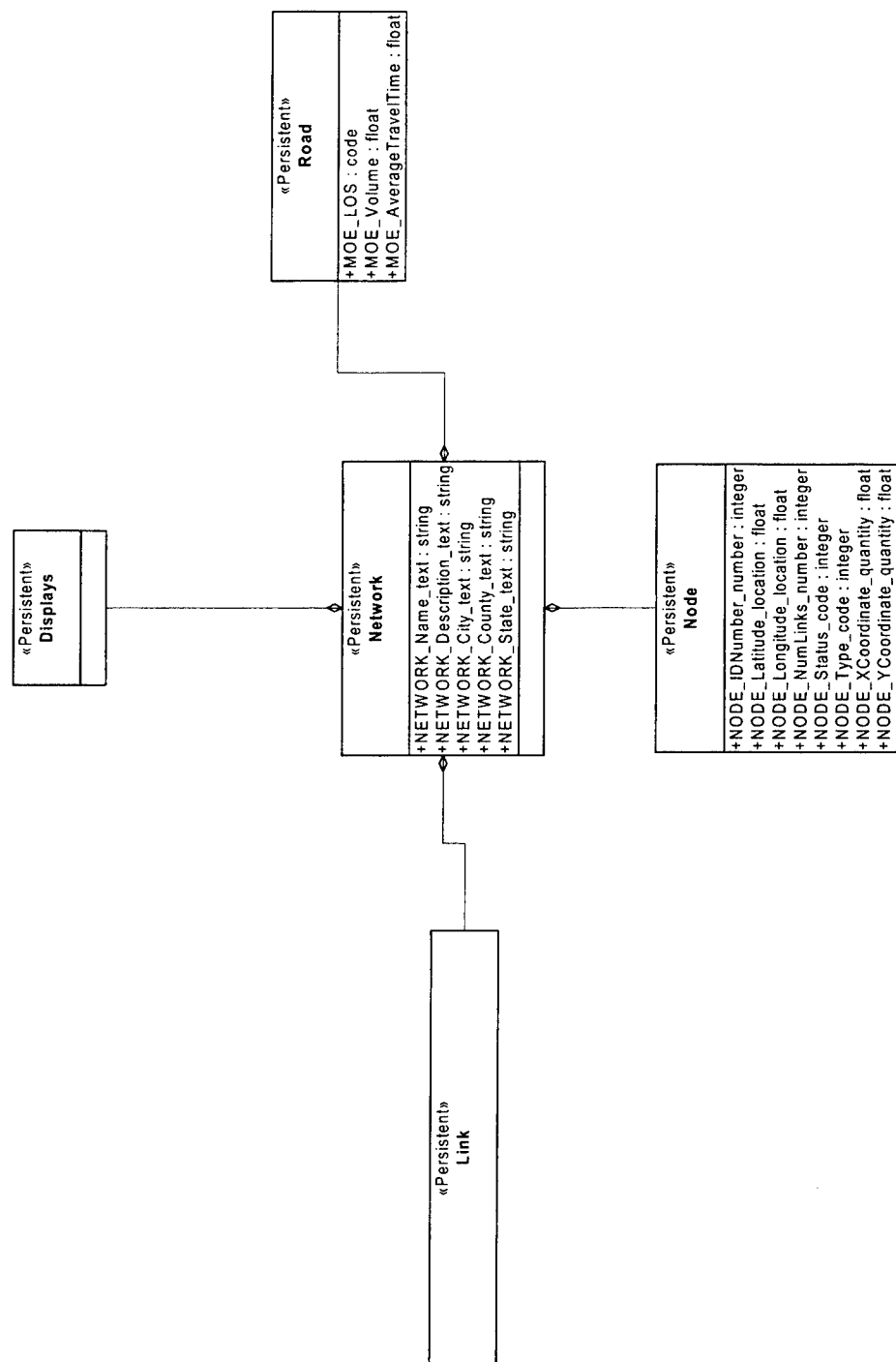


Figure 11 - Fixed Time Controller View

## Database: Fixed Time Controller View

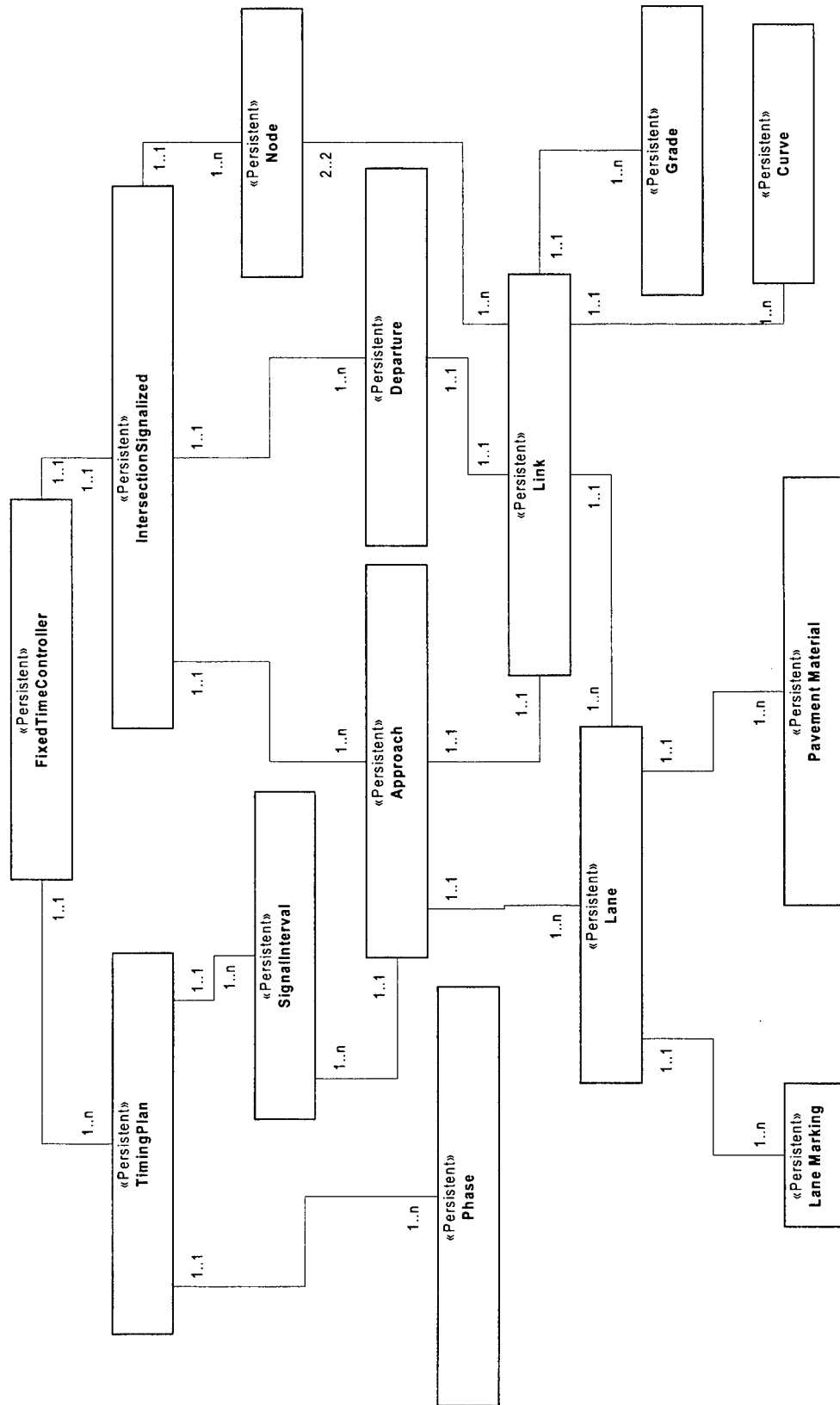


Figure 12 - Actuated Controller View

## Database: Actuated Controller View

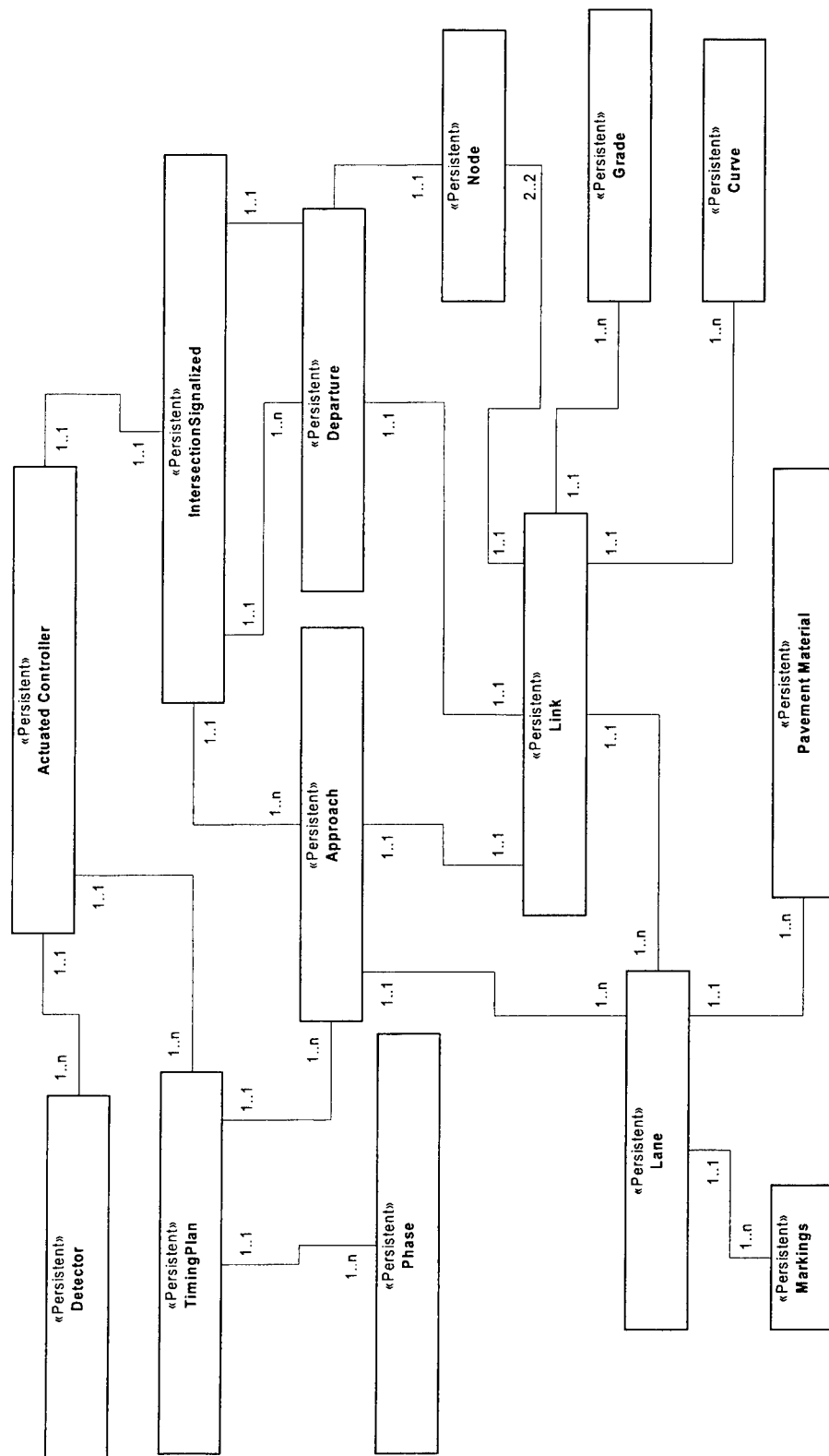


Figure 13 - Vehicle View

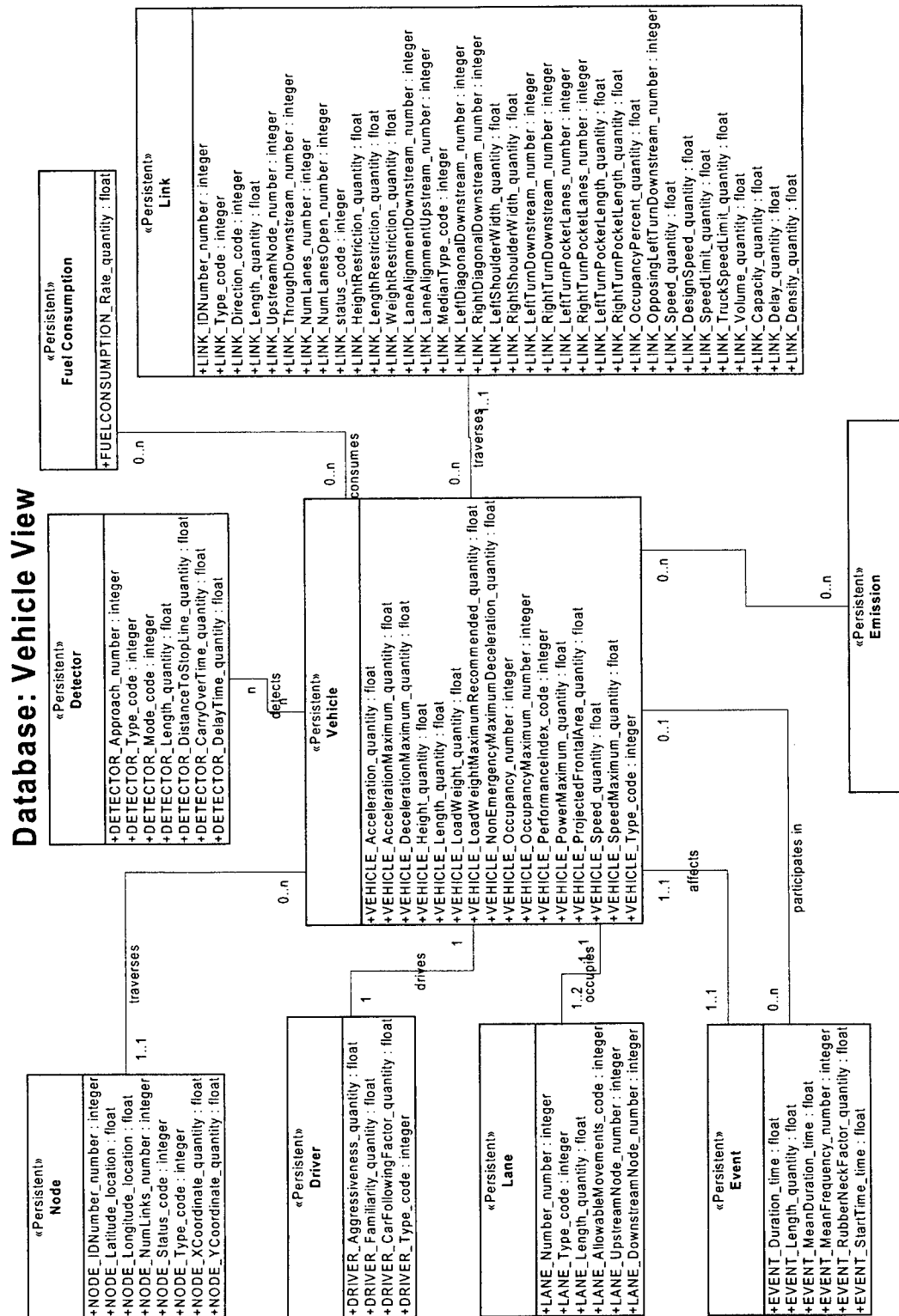


Figure 14 - Driver View

## Database: Driver View

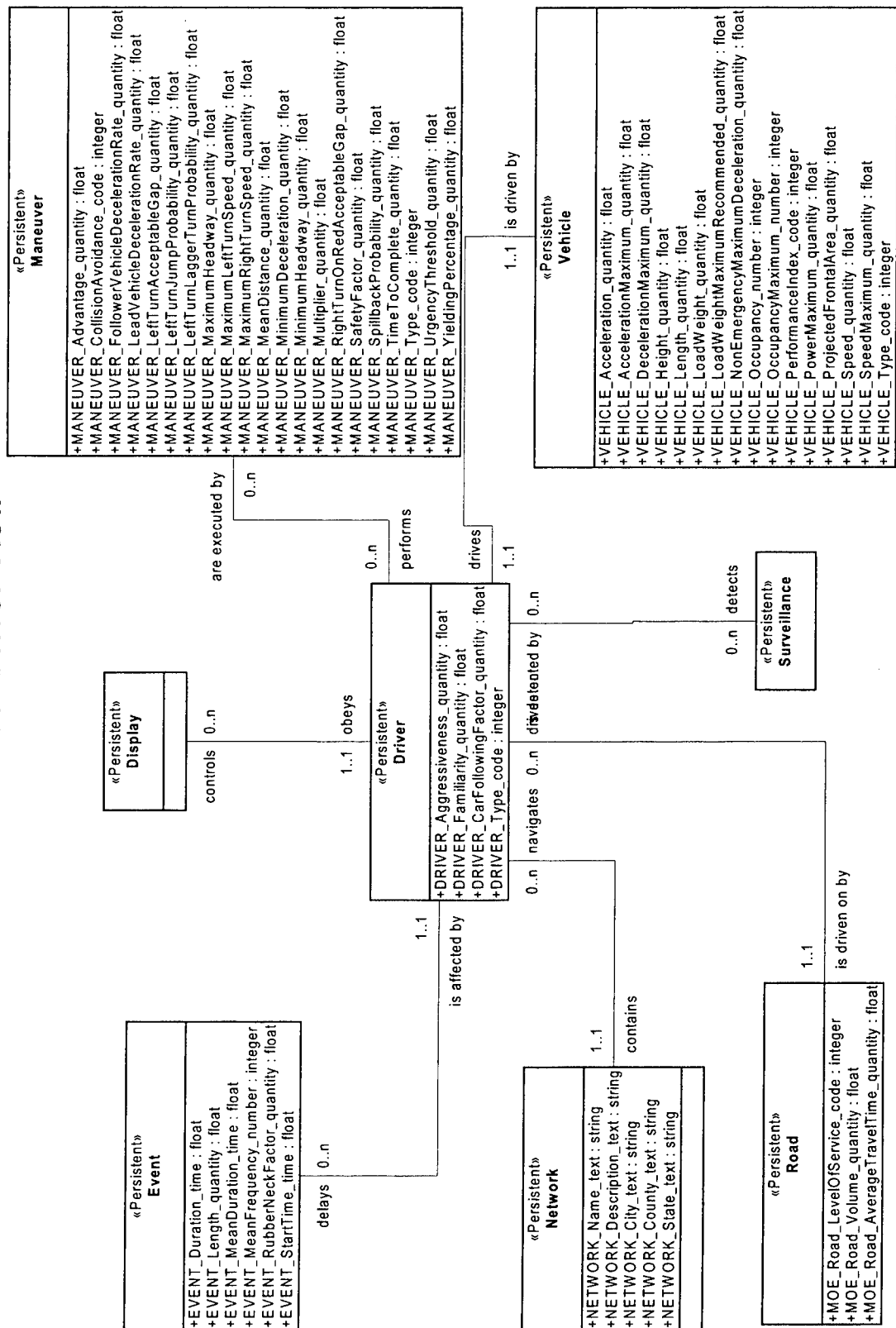


Figure 15 - Transit View

## Database: Transit View

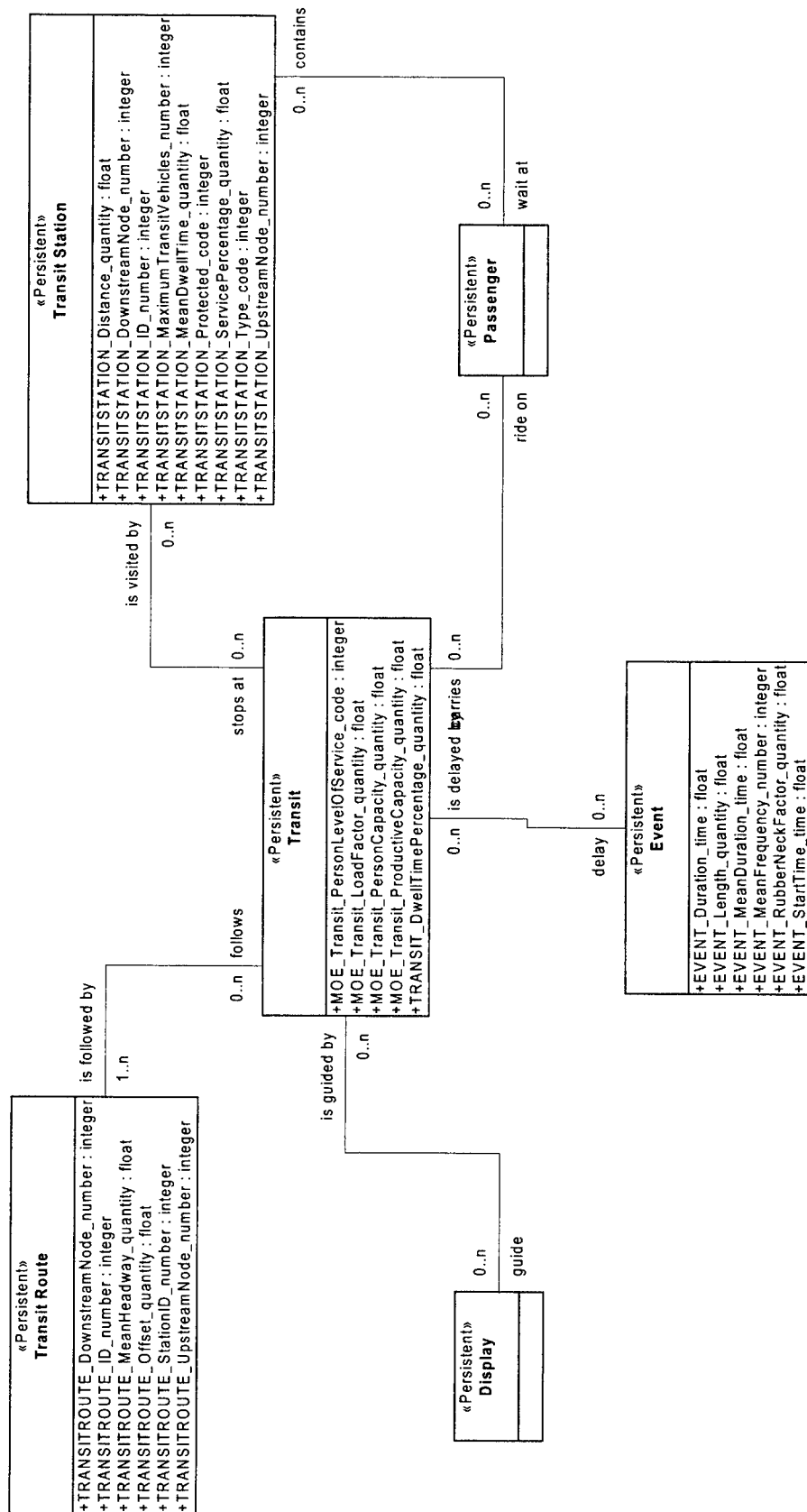




Figure 16 - Application View

## Database: Application View

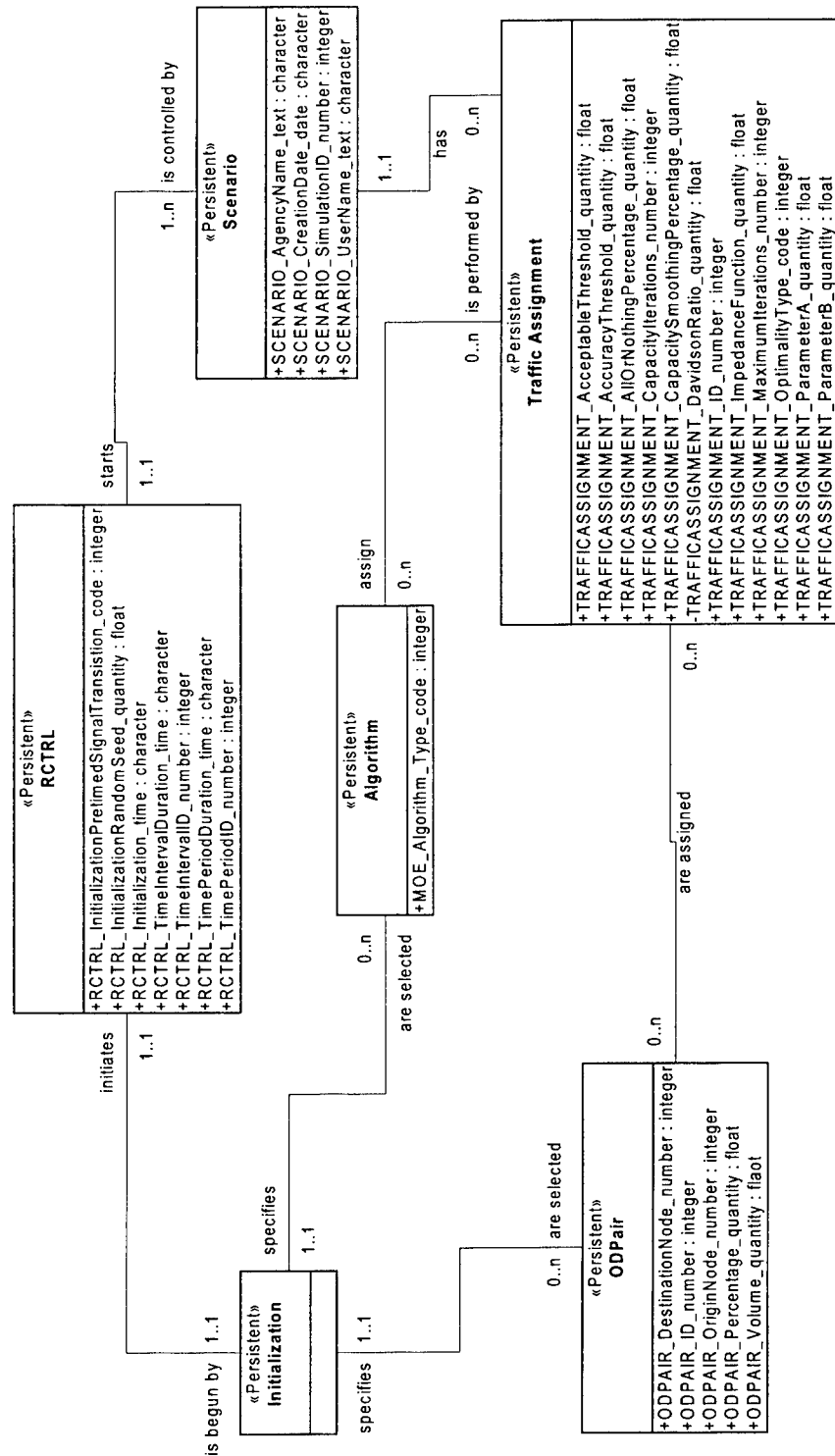
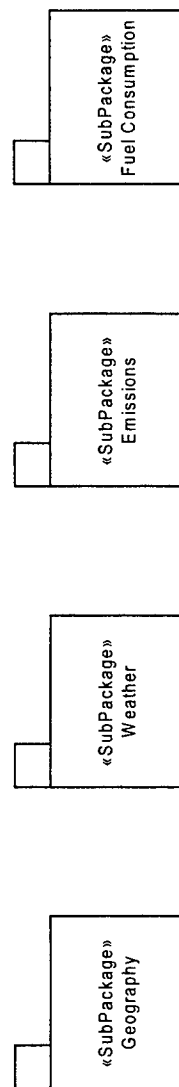


Figure 17 - Environment Subpackage

## Database: Environment SubPackage



## Class Dictionary

This table allows you to look up the classes found in the object diagram and read a brief description of them.

Name	Definition
ACTUATEDCONTROLLER	A controller whose phase changes can be triggered by traffic sensor data.
APPROACH	The region of an intersection through which cars approaching the intersection from a single Segment enter the intersection.
ARTERIAL	Signalized streets that serve primarily through traffic and provide access to abutting properties as a secondary function, having signal spacings of 2 mi or less and turn movements at intersections that usually do not exceed 20 percent of total traffic.
ARTERIAL&SYSTEMCOORDINATIONHARDWARE	Any hardware used to coordinate traffic on arterials or within a traffic system.
BICYCLE	A vehicle having two tandem wheels propelled solely by human power, upon which any person or person may ride.
BICYCLELANE	A portion of a road which has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists.
BUS	A heavy vehicle involved in the transport of passengers on a for-hire, charter, or franchised transit basis.
ACTUATEDCONTROLLER	A controller for supervising the operation of traffic control signals in accordance with the varying demands of traffic as registered with the controller by traffic detectors.
CURVE	An arbitrarily shaped line in two dimensions. The curve must have continuity at all points. In other words, it must be one connected piece, but it can have sharp corners (or not) anywhere.
DEPARTURE	The region of an intersection through which vehicles leave the intersection.
DETECTOR	A device for indicating the presence or passage of vehicles or pedestrians. This general term is usually supplemented with a modifier, i.e., loop detector, magnetic detector indicating type.
DISPLAY	Any device or group of devices for displaying the rules for moving or for controlling the movement of vehicles on a roadway.
DRIVER	A person or other intelligent agent operating a vehicle.
EVENT	Any occurrence which causes a reduction in capacity or abnormal increase in demand on a road.
EVENTENVIRONMENTAL	An environmental occurrence which causes a reduction in capacity or abnormal increase in demand on a road
EVENTINCIDENT	An (unplanned/unanticipated) occurrence in the traffic stream which causes a reduction in capacity or abnormal increase in demand.
INCIDENTDETECTION	The arrangement of detectors and processing of detector information to arrive at the decision that some type of incident has probably occurred in the traffic stream. May also be done by visual and third-party reporting means.
EVENTPLANNED	A planned occurrence which causes a reduction in capacity or abnormal increase in demand on a road

Name	Definition
FIXEDTIMECONTROLLER	Controller that operate on predetermined, fixed intervals and phase timings.
FREEWAYRAMP	A short segment of roadway serving as a connection between two traffic facilities; usually services flow in one direction only.
FREEWAYWEAVINGAREA	Sections of the freeway where two or more vehicle flows must cross each other's path along a length of the freeway.
GRADE	The slope of the roadway measured as a percentage of deviation from horizontal. A vertical slope would be a grade of 100%.
GUIDESIGN	Any traffic sign used to provide information to a motorist or pedestrian.
HIGHWAY	A non-freeway road used for intercity travel.
HOVLANE	High Occupancy Vehicle Lane. A type of lane designated for travel only by vehicles with multiple occupants.
INITIALIZATION	Run control initialization
INTERSECTION	The common area of roadways that meet or cross.
INTERSECTIONCONTROLLERHARDWARE	Any hardware device used to control traffic at intersections.
INTERSECTIONDISPLAYHARDWARE	Any hardware display device used to control traffic at intersections.
INTERSECTIONSIGNALIZED	An intersection whose traffic is controlled by a controller.
INTERSECTIONUNSIGNALIZEDCONTROLLED	An intersection that is controlled by devices other than signals, such as stop signs.
LANE	Unidirectional roadway that carries a single-file stream of vehicles.
LANEMARKING	A marking on the lane to inform or direct drivers or pedestrians. Examples would be passing/no passing lines, directional arrows and pedestrian crossing lines.
LINK	A one-way section of roadway between two nodes. It is intended that attributes of the TSDD's Link will conform as much as possible to the TMDD's LINK data elements.
MARKING	Any mark on a lane, link, highway, etc. used to control drivers or pedestrians.
MOTORHOME	A recreational motor vehicle which usually contains facilities for sleeping and eating.
MULTILANEHIGHWAY	A highway with at least two lanes for the exclusive use of traffic in each direction, with no or partial control of access, that may have periodic interruptions to flow at signalized intersections.
MULTILANEHIGHWAYDIVIDED	A subclass of MultilaneHighway in which the opposing lanes are separated by a median or two-way left turn lane.
MULTILANEHIGHWAYUNDIVIDED	A subclass of MultilaneHighway in which the opposing lanes are not separated by a median or two-way left turn lane.
MULTIUNITTRUCK	A truck whose cab (tractor) is a separate entity from its load bed (trailer).
NETWORK	A network is the aggregation of the important permanent components of a traffic model. Vehicles are not included because, for purposes of the model, they are transitory.
NODE	A point where two or more links meet. A node specifies connectivity in the network but has no dimension or shape. It is intended that the TSDD's Node will conform as much as possible to the TMDD's Node.
NORMALLANE	This is an ordinary lane for carrying traffic in one direction
PASSENGER	Any rider in a vehicle that is not the driver.
PASSENGERCAR	A personal vehicle generally used to transport passengers.
PAVEMENTMATERIAL	The type of pavement used for some part of a roadway.

Name	Definition
PEDESTRIAN	An individual traveling on foot.
PHASE	The part of the signal cycle allocated to any combination of traffic movements receiving the right-of-way simultaneously during one or more intervals.
RAIL	A heavy vehicle traveling on rails involved in the transport of passengers and or freight on a for-hire, charter, or franchised transit basis.
RAILROAD	A road consisting of two steel rails.
RECREATIONALTRAILER	A non-motorized recreational vehicle that is towed by a motorized vehicle.
RECREATIONVEHICLE	A vehicle whose primary purpose is recreation
REGULATORYSIGN	Any sign used to controll traffic or pedestrians.
ROAD	A collection of links, which may or may not be contiguous, sharing the same street name or highway number.
SIGN	An informational, directional or regulatory sign placed along a Segment. (Contrasted with ControlSign, which is conceptually a type of Signal controlling an Intersection).
SCENARIO	A specific configuration of a simulation.
SEGMENT	A segment is layered on a link or opposing pair of links to provide more detailed geometric information for accurate microscopic simulation and graphical display.
SURVEILLANCE	Any procedure or system used to monitor traffic.
SINGLEUNITTRUCK	A truck whose cab (tractor) and load bed (trailer) comprise a single entity.
SHOULDER	A non-driving lane attached to the right side of a road. It is generally intended as a relatively reliable area to leave the road.
SIGNALINTERVAL	The permissive time interval given to each approach of a fixed time controlled intersection.
SIGNALHARDWARE	Any of the hardware used for traffic signals.
SIGNAL	Any display that employs lights, motion or sound to control traffic or pedestrians.
SIGNALPEDESTRIAN	An intersection control signal used to control pedestrian movement.
TIMINGPLAN	The timing plan for a fixed time controller.
TRAFFICCONTROL	Any signal device used to control traffic.
TRANSIT	Public Transportation
TRUCK	A vehicle use to transport freight.
TWOLANEHIGHWAY	A roadway having a two-lane cross section with one lane for each direction of flow, on which passing maneuvers must be made in the opposing lane.
TWOWAYLEFTTURNLANE	The center lane on a three-lane or multilane highway which is used continuously for vehicles turning left in either direction of flow at midblock locations.
USER	Any driver, passenger or pedestrian who uses a road.
VARIABLEDISPLAY	A type of display hardware which can change in response to changing conditions on the road. An example would be changeable message signs.
VEHICLE	Any powered device use to convey passengers or freight on a road.
WARNINGSIGN	Any sign used to warn motorists or pedestrian of a hazard or impediment to traffid

## Attribute Dictionary

This table allows you to look up the attributes (properties) of a class and read its definition. The table is sorted by class name.

Name	Definition
ACTUATEDCONTROLLER_MaximumExtension_quantity	For a fully actuated controller, the length of time that a phase may be held in green in the presence of an opposing serviceable call. The maximum extension is the maximum duration of "service green" (i.e., the duration of green beyond the end of the minimum green or variable initial interval, whichever is greater).
ACTUATEDCONTROLLER_MaximumGap_quantity	This is the value from which gap reduction is initiated when an opposing call occurs. This value will be equal to or greater than the vehicle extension time; it determines the time before gap reduction.
ACTUATEDCONTROLLER_MaximumGreen_quantity	In actuated controllers, the longest time for which a green indication will be displayed in the presence of a call on an opposing phase.
ACTUATEDCONTROLLER_Node_number	The node number of the intersection controlled.
ACTUATEDCONTROLLER_Type_code	The controller type, e.g. 170, 2070, etc.
APPROACH_AmberIntervalResponse_quantity	The response of drivers to the onset of the amber indication expressed in terms of an acceptable deceleration (fpss). This value is obtained from a default table the correlates with a driver characteristics value.
APPROACH_Azimuth_quantity	The angle of this intersection approach relative to due north.
APPROACH_UpstreamNode_number	The upstream node number of this approach to an intersection.
CURVE_EndPoint_quantity	The distance on the link from the upstream end to the end of the curve.
CURVE_Radius_quantity	The radius of the curve.
CURVE_StartPoint_quantity	The distance on the link from the upstream end to the beginning of the curve.
DEPARTURE_DownStreamNode_number	The downstream node number of the departure link.
DETECTOR_Approach_number	The approach this detector is in.
DETECTOR_CarryOverTime_quantity	The amount of time to continue input to the phase after the vehicle has left the detection area.
DETECTOR_DelayTime_quantity	The input delay time to a phase while the phase is in red.
DETECTOR_DistanceToStopLine_quantity	The distance between the trailing edge of the detector sensing zone and the stop line.
DETECTOR_Length_quantity	The length of the detecting zone from leading edge of the sensing zone to the trailing edge of the sensing zone.
DETECTOR_Mode_code	The detector mode.
DETECTOR_Type_code	A code designating the type of detector. See DETECTOR_Type_code in TMDD.
DRIVER_Aggressiveness_quantity	A measure of a driver's aggressiveness in regard to maneuvering.
DRIVER_CarFollowingFactor_quantity	This value is a sensitivity factor in tenths of a second to indicate the headway this driver will allow between his car and the car he is following.
DRIVER_Familiarity_number	This is the number of next turn movements that the driver is familiar with.
DRIVER_Type_code	This value identifies the driver type and is used to correlate driver type parameters.

Name	Definition
EMISSION_AccelerationDeceleration_code	This value correlates to the Vehicle Performance Index for the specified speed and will be applied to the emission rate.
EMISSION_Rate_quantity	The emission rate for the specified type at the specified speed.
EMISSION_Type_code	This code specifies which table data is used.
EMISSION_VehiclePerformanceIndex_number	This is the Vehicle Performance Index specified in the Vehicle object.
EMISSION_VehicleSpeed_quantity	The vehicle speed applicable for the specified vehicle performance index.
EVENT_Duration_time	See EVENT_Description_text in TMDD
EVENT_Duration_time	The duration of the event. See EVENT_TimelineDuration_quantity in TMDD.
EVENT_Length_quantity	The length of the roadway affected by the event.
EVENT_MeanDuration_time	The mean duration of short-term events.
EVENT_MeanFrequency_number	The mean frequency of short-term events. Specified as events per hour.
EVENT_RubberneckFactor_quantity	The reduction in capacity for the affected lanes at the point of the event.
EVENT_StartTime_time	The time of onset for the event. See EVENT_TimelineStart_date in TMDD.
EVENTINCIDENT_Blockage_code	This code specifies where the blockage occurs. See EVENT_LanesBlockedOrClosed_code and EVENT_LanesShouldersBlocked_code in TMDD.
EVENTINCIDENT_DownstreamNode_number	The downstream node number for the link on which the incident occurred.
EVENTINCIDENT_Location_quantity	The location of the upstream end of the incident from the upstream node. See EVENT_LocationCoordinatesAltitude_location, EVENT_LocationCoordinatesLatitude_location and EVENT_LocationCoordinatesLongitude_location in TMDD
EVENTINCIDENT_UpstreamNode_number	The upstream node number for the link on which the incident occurred.
EVENTINCIDENT_WarningSignLocation_quantity	The distance from the upstream node for the location of the upstream warning sign for blockage incidents.
FIXEDTIMECONTROLLER_Node_number	The node number of the intersection that is controlled.
FREEWAY_Capacity_quantity	The maximum sustained (15-min) rate of flow at which traffic can pass a point or uniform segment of freeway under prevailing roadway and traffic conditions. Capacity is defined for a single direction of flow, and is expressed in vehicle per hour (vph).
FREEWAY_Density_quantity	The number of vehicles occupying a given length of lane or roadway averaged over time, usually expressed as vehicles per mile or vehicles per mile per lane.
FREEWAY_LevelOfService_code	A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.
FREEWAY_MaximumServiceFlowRate_quantity	The highest 15-min rate of flow that can be accommodated on a highway facility under ideal conditions while maintaining the operating characteristics for a stated level of service, expressed as passenger cars per hour per lane.
FREEWAY_Speed_quantity	A rate of motion, in distance per unit of time. $S = d / t$ (mph or fps).
FREEWAY_Volume_quantity	The number of persons or vehicles passing a point on a freeway during some time interval, often taken to be 1 hr, expressed in vehicles.

Name	Definition
FREEWAYRAMP_DivergeVolume_quantity	The total volume in the traffic stream which will separate. For the case of a one-lane, right-side on-ramp, the diverge volume is equal to the lane 1 volume immediately upstream of the subject ramp.
FREEWAYRAMP_DownstreamFreewaySegmentID_number	A unique number identifying the downstream freeway segment.
FREEWAYRAMP_FlowRate_quantity	Vehicles per hour per lane.
FREEWAYRAMP_FractionalOffset_quantity	In a group of dependent metered lanes, the start of the green interval for any lane can occur after a variable time (fraction of the cycle length) of the green interval for any lane in the same dependency group. The offset time is equal to the cycle length divided by the number of metered lanes in the dependency group.
FREEWAYRAMP_FreewayCapacity_quantity	The capacity of the freeway in vehicles per hour per lane.
FREEWAYRAMP_FreewayLane_number	Denotes the lane of the freeway that feeds lane 1 of the off-ramp, if one exists.
FREEWAYRAMP_FreewayVolume_quantity	The total freeway volume. Generally considered at the point where it is at the maximum level, i.e., upstream of an off-ramp and downstream of an on-ramp.
FREEWAYRAMP_LaneOccupancy_quantity	The percentage of time that the ramp meter detector is actuated.
FREEWAYRAMP_LevelOfService_code	A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.
FREEWAYRAMP_MeteringHeadway_number	The time separation (in seconds) between successive green signals in a ramp lane.
FREEWAYRAMP_MeteringType_code	A system in which the entry of vehicles onto a freeway from an on-ramp is controlled by a traffic signal allowing a fixed number of vehicles to enter during each cycle.
FREEWAYRAMP_MeterRate_quantity	Number of vehicles allowed to enter a given section of a roadway per unit time.
FREEWAYRAMP_MeterStartTime_time	The time for the onset of metering.
FREEWAYRAMP_NumberOfLanes_number	The total number of freeway ramp lanes.
FREEWAYRAMP_OffRampSignLocation_location	The location of the off ramp sign on the freeway.
FREEWAYRAMP_RampID_number	A unique number identifying the ramp. See RAMP_IdNumber_number in TMDD.
FREEWAYRAMP_RampType_code	A code to indicate the type of ramp.
FREEWAYRAMP_UpstreamFreewaySegmentID_number	A unique number identifying the upstream freeway segment.
FREEWAYWEAVINGAREA_MinimumAverageNonWeavingSpeed_quantity	Average minimum running speed for all non-weaving vehicles occupying a given section of highway over some time.
FREEWAYWEAVINGAREA_MinimumAverageWeavingSpeed_quantity	Average minimum running speed for all weaving vehicles occupying a given section of highway over some time.
FREEWAYWEAVINGAREA_Volume_quantity	The number of persons or vehicles passing a point on a lane, roadway, or other trafficway during some time interval, often taken to be 1 hr, expressed in vehicles.
FUELCONSUMPTION_Rate_quantity	The fuel consumption rate for the specified Vehicle Performance Index.
GRADE_Location_quantity	The distance on the link from the upstream end.
GRADE_Percent_quantity	The percent grade at a point on a link.
GRADE_SightDistance_quantity	The sight distance at a point on a link.
INCIDENTDETECTION_OffLineAlgorithmType_code	This code specifies the type of algorithm to be used for off-line incident detection.



Name	Definition
INCIDENTDETECTION_OffLineEvaluationFrequency_number	The evaluation frequency for MOE estimation and point processing or evaluation frequency for surveillance detectors in seconds.
INCIDENTDETECTION_OffLineParameterValue_quantity	A parameter value to be used in the detection algorithm.
INCIDENTDETECTION_OffLinePollingFrequency_number	The polling frequency of the incident detector in number / second.
INCIDENTDETECTION_OffLineStationID_number	The number of the surveillance station to be used for MOE estimation, point processing and off-line incident detection.
INCIDENTDETECTION_OnLineAlgorithmType_code	This code specifies the type of algorithm to be used for on-line incident detection.
INCIDENTDETECTION_OnLineEvaluationFrequency_number	The evaluation frequency for incident detection in number of time steps between evaluations.
INCIDENTDETECTION_OnLineParameterValue_quantity	A parameter value to be used in the detection algorithm.
INCIDENTDETECTION_OnLinePollingFrequency_number	The polling frequency of the incident detector in number / second.
INCIDENTDETECTION_OnLineStationID_number	The number of the surveillance station to be used for on-line incident detection.
INTERSECTIONSIGNALIZED_AllowableGap_quantity	The time gap between successive moving vehicles at which a greater gap should terminate the green on one phase and transfer right-of-way to another phase.
INTERSECTIONSIGNALIZED_AmberIntervalResponse_quantity	The response of drivers to the onset of the amber indication is expressed in terms of an acceptable deceleration. The deceleration that is required for the vehicle to stop is readily calculated, knowing the current position and speed of the vehicle. If deceleration is acceptable the vehicle will stop; otherwise, it will continue through the intersection.
INTERSECTIONSIGNALIZED_ApproachDelay_quantity	Stopped-time delay at a signalized intersection plus time lost because of deceleration to and acceleration from a stop, generally estimated as 1.3 times the stopped time delay.
INTERSECTIONSIGNALIZED_AverageStoppedTimeDelay_quantity	The total time vehicles are stopped in an intersection approach or lane group during a specified time interval divided by the volume departing from the approach or lane group during the same time period, in seconds per vehicle.
INTERSECTIONSIGNALIZED_BackgroundCycle_quantity	The term used to identify the cycle length established by a coordination unit and master control in coordinated systems.
INTERSECTIONSIGNALIZED_Call_code	A registration of a demand for right-of-way by traffic at a controller unit. The call to the controller is via detector actuation.
INTERSECTIONSIGNALIZED_ChangeInterval_quantity	The "yellow" plus "all red" intervals that occur between phases of a traffic signal to provide for clearance of the intersection before conflicting movements are released.
INTERSECTIONSIGNALIZED_CycleLength_code	The time required for one complete sequence of signal phases.
INTERSECTIONSIGNALIZED_DetectorSetback_quantity	The time required for one complete sequence of signal phases.
INTERSECTIONSIGNALIZED_DetectorType_code	A device for indicating the presence or passage of vehicles or pedestrians. This general term is usually supplemented with a modifier, i.e., loop detector, magnetic detector indicating type.
INTERSECTIONSIGNALIZED_DischargeHeadway_quantity	The mean time gap between vehicles discharging from a standing queue.
INTERSECTIONSIGNALIZED_EffectiveGreen_quantity	The time allocated for a given traffic movement (green plus yellow) at a signalized intersection less the start-up and clearance lost times for the movement.

Name	Definition
INTERSECTIONSIGNALIZED_EffectiveRed_quantity	The time during which a given traffic movement or set of movements is directed to stop; cycle length minus effective green time.
INTERSECTIONSIGNALIZED_LagPhase_quantity	The lag phase setting designates which phase of a phase pair displays green first, before the other phase. A phase pair is defined as adjacent phases in the same ring on the same side of the barrier on a standard NEMA phase diagram. In a standard NEMA 8 phase configuration operating in leading dual lefts on both streets, phases 2, 4, 6 and 8 are lag phases while phases 1, 3, 5, and 7 are leading phases.
INTERSECTIONSIGNALIZED_MaximumSpeedLeftTurn_quantity	Moving vehicles must slow as they approach an intersection if they are to negotiate a turning maneuver, even when unimpeded by other vehicles. The default turning speed for negotiating left turns is 22 fps (7 m/s). The maximum allowable left turn speed is 44 fps (14 m/s).
INTERSECTIONSIGNALIZED_MaximumSpeedRightTurn_quantity	Moving vehicles must slow as they approach an intersection if they are to negotiate a turning maneuver, even when unimpeded by other vehicles. The default turning speed for negotiating right turns is 13 fps (4 m/s). The maximum allowable right turn speed is 26 fps (8 m/s).
INTERSECTIONSIGNALIZED_PedestrianDelay_quantity	The duration of vehicular delay due to pedestrian interaction during a vehicle green phase.
INTERSECTIONSIGNALIZED_ProbabilityLeftTurnJumper_quantity	A left turn jumper is a vehicle that is first in queue when a signal changes to green and executes a left turn maneuver before the oncoming traffic moves.
INTERSECTIONSIGNALIZED_StartingDelay_quantity	A delay experienced in initiating the movement of queued traffic from a stop to a maximum flow rate through a signalized intersection.
INTERSECTIONSIGNALIZED_StartupLostTime_quantity	The delay experienced by the first vehicle in queue when responding to a phase change from red to green.
INTERSECTIONSIGNALIZED_StopDelay_quantity	For each turn movement, the total time that vehicles of the specified turn movement were stopped on the link. Stop time is defined as any time that a vehicle is stopped on a link including buses in dwell.
INTERSECTIONUNSIGNALIZEDCONTROLLED_AcceptanceGap_quantity	A vehicle at a stop line facing a sign cannot discharge until an acceptable gap is available in the cross-street traffic. The acceptable gap depends on the type of sign, driver characteristic and the total number of lanes to be crossed. Likewise for a vehicle turning left or right.
INTERSECTIONUNSIGNALIZEDCONTROLLED_CriticalGap_quantity	The minimum time interval between vehicles in a major traffic stream that permits side-street vehicle at a stop-controlled approach to enter the intersection under prevailing traffic and roadway conditions, in seconds.
INTERSECTIONUNSIGNALIZEDCONTROLLED_LeftTurnAcceptableGap_quantity	The acceptable gap for Left-Turns.
INTERSECTIONUNSIGNALIZEDCONTROLLED_MovementCapacity_quantity	The capacity of a specific movement at a stop-controlled intersection approach, assuming that the movement has exclusive use of a separate lane, in passenger cars per hour.
INTERSECTIONUNSIGNALIZEDCONTROLLED_NewFSAcceptanceGap_quantity	The acceptable gap to cross the far-side of a cross street.
INTERSECTIONUNSIGNALIZEDCONTROLLED_NewNSAcceptanceGap_quantity	The acceptable gap to cross a near-side cross street.
INTERSECTIONUNSIGNALIZEDCONTROLLED_RightTurnOnRedAcceptableGap_quantity	The acceptable gap for Right Turn on red or at signs.
LANE_AllowableMovements_code	The movements that are allowed through the intersection from this lane.

Name	Definition
LANE_AntireferenceEndLocation_quantity	Distance along this Lane's Segment from the reference end of the Segment to the antireference end of the Lane.
LANE_Channelization_code	Traffic restrictions for the lane.
LANE_DetectorLength_quantity	The effective loop length in feet
LANE_DetectorLocation_quantity	The location of the detector from the upstream end of the lane in feet.
LANE_DetectorType_code	A device for indicating the presence or passage of vehicles or pedestrians. This general term is usually supplemented with a modifier, i.e., loop detector, magnetic detector indicating type.
LANE_IncidentCode_code	The incident code specifying the effect on the lane.
LANE_Length_quantity	The travel distance from the upstream end to the downstream end of a Lane. (Less than or equal to the length of the Segment to which the Lane belongs.)
LANE_Type_code	Lane type.
LANE_Width_quantity	The width of the lane.
LINK_AverageDelayTime_quantity	For each turn movement, the average time that vehicles were delayed on the link. Calculated as the delay time for the turn movement divided by vehicle trips for the turn movement.
LINK_AverageSpeed_quantity	For each turn movement, the average speed of vehicles on a link that have completely traversed the link. Calculated as vehicle miles divided by the total time.
LINK_Capacity_quantity	See LINK_Capacity_quantity in the TMDD: "The Link maximum capacity in vehicles per hour."
LINK_Delay_quantity	See LINK_Delay_quantity in the TMDD: "Calculated delay for vehicles driving along a particular Link. this is additional time it will take above that recorded during free flow conditions to travel from one end of the link to the other."
LINK_Density_quantity	See LINK_Density_quantity in the TMDD: "Vehicle concentration per kilometer (in vehicles per kilometer) of the Link."
LINK_DesignSpeed_quantity	See LINK_DesignSpeed_quantity in the TMDD: "The Link design speed in kilometers per hour."
LINK_Direction_code	See LINK_Direction_code in the TMDD: "The direction of the Link traffic flow, e.g E,W,N,S."
LINK_DistanceToStopLine_quantity	The distance between the stop line and the curb line.
LINK_FreeFlowSpeedPercentage_quantity	This percentage is correlated with the driver characteristics and is multiplied with the Mean Free Flow Speed for the link to obtain a Free Flow Speed for drivers of the specified characteristics for this link.
LINK_GroupID_number	When a link is part of an aggregation such as an interchange or a corridor, this number can be used to identify members of a group.
LINK_GroupSequence_number	When a link is part of an aggregation such as an interchange or a corridor, this number can be used to sequence members of a group.
LINK_HeightRestriction_quantity	See LINK_HeightRestriction_quantity in the TMDD: "Minimum vertical clearance on a Link in centimeters."
LINK_IdNumber_number	See LINK_IdNumber_number in the TMDD: "An unique numerical designation for the Link."
LINK_LaneAlignmentdownstream_number	The lane number of the downstream through node that aligns with downstream alignment lane of this link.
LINK_LaneAlignmentupstream_number	The lane number of the upstream node that aligns with the upstream alignment lane of this link.

<b>Name</b>	<b>Definition</b>
LINK_LeftDiagonalDownstream_number	The node number of the downstream node that can receive left diagonal traffic.
LINK_LeftShoulderWidth_quantity	See LINK_LeftShoulderWidth_quantity in the TMDD: "The width of the left shoulder of the Link (in centimeters)."
LINK_LeftTurnDownstream_number	The node number of the downstream node that can receive left turning traffic.
LINK_LeftTurnPocketLanes_number	The number of lanes in the left turn pocket. See LINK_LeftTurnPocketLaneNumber_quantity in TMDD.
LINK_LeftTurnPocketLength_quantity	The length of the left turn pocket (if any). See LINK_LeftTurnPocketLength_quantity in TMDD.
LINK_Length_quantity	See LINK_Length_quantity in the TMDD: "The length of the link in meters."
LINK_LengthRestriction_quantity	See LINK_LengthRestriction_quantity in the TMDD: "Maximum Vehicle Length allowable on a Link in centimeters."
LINK_LevelOfService_code	See LINK_LevelOfService_code in the TMDD: "A qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers as defined in the Highway Capacity Manual."
LINK_MedianType_code	See LINK_MedianType_code in the TMDD: "Type of median separation for the Link."
LINK_NumLanes_number	See LINK_NumLanes_quantity in the TMDD: "The lowest number of lanes at any point in the Link."
LINK_NumLanesOpen_number	See LINK_NumLanesOpen_quantity in the TMDD: "The lowest number at any point of lanes currently open in the link."
LINK_Occupancy_percent	See LINK_Occupancy_percent in the TMDD: "Percent occupancy measured for the Link."
LINK_OpposingLeftTurnDownstream_number	The node number of the upstream node, downstream, that opposes left turning traffic.
LINK_PavementCondition_code	The condition of the pavement.
LINK_PavementType_code	See LINK_PavementType_code in the TMDD: "The type of material from which the pavement is constructed (e.g. concrete, asphalt)."
LINK_QueueDischargeHeadway_quantity	The delay until discharge for each queued vehicle. A different headway for each driver characteristic is assigned.
LINK_RightDiagonalDownstream_number	The node number of the downstream node that can receive right diagonal traffic.
LINK_RightShoulderWidth_quantity	See LINK_RightShoulderWidth_quantity in the TMDD: "The width of the right shoulder for the Link in centimeters."
LINK_RightTurnDownstream_number	The node number of the downstream node that can receive right turning traffic.
LINK_RightTurnPocketLanes_number	The number of lanes in the right turn pocket. See LINK_RightTurnPocketLane_quantity in TMDD.
LINK_RightTurnPocketLength_quantity	The length of the right turn pocket (if any). See LINK_RightTurnPocketLength_quantity in TMDD.
LINK_SightDistance_quantity	The forward visibility of a driver at the stop line to see approaching vehicles.
LINK_Speed_quantity	See LINK_Speed_quantity in the TMDD: "The average Link vehicular speed in Kilometers per hour."
LINK_SpeedLimit_quantity	See LINK_SpeedLimit_quantity in the TMDD: "Speed limit for automobiles in Kilometers per hour."

<b>Name</b>	<b>Definition</b>
LINK_StartUpLostTime_quantity	The start-up lost time for the first vehicle in queue when the signal turns to green. A different value for each driver characteristic is assigned.
LINK_Status_code	See LINK_Status_code in the TMDD: "The Link Status."
LINK_ThroughDownstreamNode_number	The node number of the downstream node that can receive through traffic.
LINK_TruckSpeedLimit_quantity	See LINK_TruckSpeedLimit_quantity in the TMDD: "Speed limit for trucks in kilometers per hour."
LINK_Type_code	See LINK_Type_code in the TMDD: "The designation of the Link type. (Fwy., Art., Psu., Sur., Ded., Rail, Bus, Air, Ferry, other modes)."
LINK_UpstreamNode_number	The number of the upstream node.
LINK_Volume_quantity	See LINK_Volume_quantity in the TMDD: "Projected or measured hourly volume for the Link expressed in vehicles per hour."
LINK_WeightRestriction_quantity	See LINK_WeightRestriction_quantity in the TMDD: "Maximum Vehicle Weight allowable on a Link in kilograms."
MANEUVER_Advantage_quantity	Advantage threshold for discretionary maneuver.
MANEUVER_CollisionAvoidance_code	Parameter for collision avoidance time period. Used in gap acceptance algorithm.
MANEUVER_FollowerVehicleDecelerationRate_quantity	Deceleration rate of follower vehicle.
MANEUVER_LeadVehicleDecelerationRate_quantity	Deceleration rate of the lead vehicle.
MANEUVER_LeftTurnAcceptableGap_quantity	The acceptable gap in oncoming traffic for a driver attempting a left turn.
MANEUVER_LeftTurnJumpProbability_quantity	The probability that the first vehicle in queue will execute a left-turn when the signal changes to green.
MANEUVER_LeftTurnLaggerTurnProbability_quantity	The probability that a driver will execute a left-turn across opposing traffic during a NO GO interval.
MANEUVER_MaximumHeadway_quantity	The headway above which no driver will attempt the maneuver.
MANEUVER_MaximumLeftTurnSpeed_quantity	The maximum speed for a left turn.
MANEUVER_MaximumRightTurnSpeed_quantity	The maximum speed for a right turn.
MANEUVER_MeanDistance_quantity	Mean longitudinal distance over which drivers decide to perform on lane change.
MANEUVER_MinimumDeceleration_quantity	The minimum deceleration at the beginning of a discretionary maneuver. Used in the computation of acceptable risk.
MANEUVER_MinimumHeadway_quantity	Headway below which all drivers will attempt the maneuver.
MANEUVER_Multiplier_quantity	Multiplier for desire to complete discretionary maneuver.
MANEUVER_RightTurnOnRedAcceptableGap_quantity	The acceptable gap in oncoming traffic for a driver attempting a right-turn on red of at a sign.
MANEUVER_SafetyFactor_quantity	The degree of caution used by the driver.
MANEUVER_SpillbackProbability_quantity	The probability that a vehicle about to discharge will join a spillback.
MANEUVER_TimeToComplete_quantity	Time to complete the maneuver.
MANEUVER_Type_code	The code identifying the type of maneuver to be performed.
MANEUVER_UrgencyThreshold_quantity	Urgency of a driver to initiate a discretionary maneuver. Based on the driver's aggressiveness, the remaining distance available and the complexity of the maneuver.
MANEUVER_YieldingPercentage_quantity	Percentage of drivers desiring to yield the right-of-way to maneuvering vehicles.
MOE_Algorithm_Type_code	The code of the MOE estimation algorithm to be applied.

Name	Definition
MOE_Arterial_AverageControlDelay_quantity	Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Control delay may also be referred to as <i>signal delay</i> .
MOE_Arterial_AverageRunningTime_quantity	The average time vehicles are in motion while traversing a highway segment of given length, excluding stopped-time delay, in seconds per vehicle or minutes per vehicle.
MOE_Arterial_AverageTravelSpeed_code	The average speed of a traffic stream computed as the length of a highway segment divided by the average travel time of vehicles traversing the segment, in miles per hour.
MOE_Arterial_LevelOfService_code	A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.
MOE_Freeway_Capacity_quantity	The maximum sustained (15-min) rate of flow at which traffic can pass a point or uniform segment of freeway under prevailing roadway and traffic conditions. Capacity is defined for a single direction of flow, and is expressed in vehicle per hour (vph).
MOE_Freeway_Density_quantity	The number of vehicles occupying a given length of lane or roadway averaged over time, usually expressed as vehicles per mile or vehicles per mile per lane.
MOE_Freeway_LevelOfService_code	A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.
MOE_Freeway_MaximumServiceFlowRate_quantity	The highest 15-min rate of flow that can be accommodated on a highway facility under ideal conditions while maintaining the operating characteristics for a stated level of service, expressed as passenger cars per hour per lane.
MOE_Freeway_Speed_quantity	A rate of motion, in distance per unit of time. $S = d / t$ (mph or fps).
MOE_Freeway_Volume_quantity	The number of persons or vehicles passing a point on a lane, roadway, or other trafficway during some time interval, often taken to be 1 hr, expressed in vehicles.
MOE_FreewayRamp_DivergeVolume_quantity	The total volume in the traffic stream which will separate. For the case of a one-lane, right-side on-ramp, the diverge volume is equal to the lane 1 volume immediately upstream of the subject ramp.
MOE_FreewayRamp_FreewayVolume_quantity	The total freeway volume. Generally considered at the point where it is at the maximum level, i.e., upstream of an off-ramp and downstream of an on-ramp.
MOE_FreewayRamp_LevelOfService_code	A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.
MOE_FreewayRamp_MergeVolume_quantity	The total volume in the traffic streams which will join. For the case of a one-lane, right-side on-ramp, the merge volume is the sum of the lane 1 volume plus the ramp volume.
MOE_FreewayRamp_Volume_quantity	The number of persons or vehicles passing a point on a lane, roadway, or other trafficway during some time interval, often taken to be 1 hr, expressed in vehicles.
MOE_FreewayWeavingArea_LevelOfService_code	A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

Name	Definition
MOE_FreewayWeavingArea_MinimumAverageNonWeavingSpeed_quantity	Average minimum running speed for all non-weaving vehicles occupying a given section of highway over some time.
MOE_FreewayWeavingArea_MinimumAverageWeavingSpeed_quantity	Average minimum running speed for all weaving vehicles occupying a given section of highway over some time.
MOE_FreewayWeavingArea_Volume_quantity	The number of persons or vehicles passing a point on a lane, roadway, or other trafficway during some time interval, often taken to be 1 hr, expressed in vehicles.
MOE_IntersectionSignalized_ApproachCapacity_quantity	The maximum rate of flow (for the subject approach) which may pass through the intersection under prevailing traffic, roadway and signalization conditions.
MOE_IntersectionSignalized_ApproachVolume_quantity	The number vehicles which may pass through the intersection under prevailing traffic, roadway and signalization conditions during some time interval, often taken to be 1 hr, expressed in vehicles.
MOE_IntersectionSignalized_CriticalVCRatio_quantity	A v/c ratio for the intersection as a whole, considering only the lane groups or approaches that have the highest flow ratio, v/s, for a given signal phase.
MOE_IntersectionSignalized_FlowRatio_quantity	The ratio of the actual flow rate for the approach or lane group to the saturation flow rate.
MOE_IntersectionSignalized_LevelOfService_code	A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.
MOE_IntersectionSignalized_SaturationFlowRate_quantity	The maximum rate of flow that can pass through a given intersection approach or lane group under prevailing traffic and roadway conditions, assuming that the approach or lane group had 100 percent of real time available as effective green time.
MOE_IntersectionUnsignalizedControlled_AverageDelay_quantity	The total additional travel time experienced by drivers, passengers, or pedestrians as a result of control measures and interaction with other users of the facility divided by the volume departing from the corresponding cross section of the facility.
MOE_IntersectionUnsignalizedControlled_ConflictingVolume_quantity	The volume of traffic that conflicts with a specific movement at an unsignalized intersection.
MOE_IntersectionUnsignalizedControlled_QueueLength_quantity	(1) Number of vehicles stopped in a lane behind the stopline at a traffic signal. (2) Number of vehicles that are stopped or moving in a line where the movement of each vehicle is constrained by that of the lead vehicle.
MOE_IntersectionUnsignalizedControlled_Volume_quantity	The number of persons or vehicles passing a point on a lane, roadway, or other trafficway during some time interval, often taken to be 1 hr, expressed in vehicles.
MOE_MultilaneHighway_AverageTravelSpeed_quantity	The average speed of a traffic stream computed as the length of a highway segment divided by the average travel time of vehicles traversing the segment, in miles per hour.
MOE_MultilaneHighway_Density_quantity	The number of vehicles occupying a given length of lane or roadway averaged over time, usually expressed as vehicles per mile or vehicles per mile per lane.
MOE_MultilaneHighway_FreeFlowSpeed_quantity	(1) The theoretical speed of traffic when density is zero, that is, when no vehicles are present; (2) the average speed of vehicles over an arterial segment not close to signalized intersections under conditions of low volume.
MOE_MultilaneHighway_LevelOfService_code	A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

Name	Definition
MOE_MultilaneHighway_ServiceFlowRate_quantity	The maximum hourly rate at which persons or vehicles can be reasonably expected to traverse a point of a lane or roadway during a given time period (usually 15 min) under prevailing roadway, traffic, and control conditions while maintaining a designated level of service, expressed as vehicles per hour or vehicles per hour per lane.
MOE_MultilaneHighway_Volume_quantity	The number of persons or vehicles passing a point on a lane, roadway, or other trafficway during some time interval, often taken to be 1 hr, expressed in vehicles.
MOE_Pedestrian_Density_quantity	The average number of pedestrians per unit of area within a walkway or queuing area, expressed as pedestrians per square foot.
MOE_Pedestrian_FlowRate_quantity	The number of pedestrians passing a point per unit time, expressed as pedestrians per 15 minutes or pedestrians per minute; "point" refers to a perpendicular line of sight across the width of a walkway.
MOE_Pedestrian_LevelOfService_code	Convenience factors such as the ability to select walking speeds, bypass slower pedestrians, avoid conflicts with others and degrees of crowding in queuing areas, such as sidewalk corners, transit platforms, and other waiting areas.
MOE_Pedestrian_Space_quantity	The average area provided for each pedestrian in a walkway or queuing area, expressed in terms of square feet per pedestrian; this is the inverse of density, but is a more practical unit for the analysis of pedestrian facilities.
MOE_Pedestrian_Speed_quantity	The average pedestrian walking speed, generally expressed in units of feet per second.
MOE_Pedestrian_UnitWidthFlow_quantity	The average flow of pedestrians per unit of effective walkway width, expressed as pedestrians per minute per foot.
MOE_Road_AverageTravelTime_quantity	The average time spent by vehicles traversing a road segment of given length, including all stopped-time delay, in seconds per vehicle or minutes per vehicle.
MOE_Road_LevelOfService_code	A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.
MOE_Road_Volume_quantity	The number of persons or vehicles passing a point on a lane, roadway, or other trafficway during some time interval, often taken to be 1 hr, expressed in vehicles.
MOE_Transit_LoadFactor_quantity	The ratio of total passengers carried to the number of seats during a specified time period.
MOE_Transit_PersonCapacity_quantity	The maximum number of persons that can be carried past a given location during a given time period under specified operating conditions without unreasonable delay, hazard, or restriction. Usually measured in terms of persons per hour.
MOE_Transit_PersonLevelOfService_code	The quality of service offered the passenger within a transit vehicle, as determined by the available space per passenger.
MOE_Transit_ProductiveCapacity_quantity	A measure of efficiency or performance. The product of passenger capacity along a transit line and speed.
MOE_TwoLaneHighway_AverageTravelSpeed_quantity	The average speed of a traffic stream computed as the length of a highway segment divided by the average travel time of vehicles traversing the segment in both directions, in miles per hour.



Name	Definition
MOE_TwoLaneHighway_Capacity_quantity	The maximum rate of flow at which persons or vehicles can be reasonably expected to traverse a point or uniform segment of a lane or roadway during a specified time period under prevailing roadway, traffic, and control conditions, usually expressed as vehicles per hour or persons per hour.
MOE_TwoLaneHighway_CapacityUtilization_quantity	The ratio (v/c ratio) of the demand flow rate to the capacity of the facility.
MOE_TwoLaneHighway_DemandFlowRate_quantity	The traffic volume expected to desire service past a point or segment of the highway system at some future time, or the traffic currently arriving or desiring service past such a point, usually expressed as vehicles per hour.
MOE_TwoLaneHighway_PercentTimeDelay_quantity	The average percent of time that all vehicles are delayed while traveling in platoons due to the inability to pass.
NETWORK_City_text	The name of the city where a Network is located.
NETWORK_County_text	The name of the county where a Network is located.
NETWORK_Description_text	A textual description of a Network. This attribute can contain whatever notes about the model the modeler chooses to make.
NETWORK_Name_text	A label for a traffic network. (Are there any constraints about uniqueness of the name? How could such a constraint be enforced?)
NETWORK_State_quantity	A 'snapshot' of a network.
NODE_IdNumber_number	See NODE_IdNumber_number in the TMDD: "An unique identification number for Node."
NODE_Latitude_location	See NODE_Latitude_location in the TMDD: "Latitude of Node."
NODE_Longitude_location	See NODE_Longitude_location in the TMDD: "Longitude of Node in microdegrees."
NODE_NumLinks_quantity	See NODE_NumLinks_quantity in the TMDD: "Number of Links at this Node."
NODE_Status_code	See NODE_Status_code in the TMDD: "NODE traffic status or condition."
NODE_Type_code	The code to identify the type of node.
NODE_XCoordinate_quantity	The X Coordinate of the node.
NODE_YCoordinate_quantity	The Y Coordinate of the node.
ODPAIR_DestinationNode_number	The destination node number of the ODPair.
ODPAIR_ID_number	A unique number identifying an Origin-Destination pair.
ODPAIR_OriginNode_number	The origin node number.
ODPAIR_Percentage_quantity	The percentage of vehicles entering through the origin node.
ODPAIR_Volume_quantity	Volume traveling from the origin node to the destination node.
PARKINGZONE_ExpectedNumManeuvers_number	The expected number of parking maneuvers for a specified time period.
PARKINGZONE_Length_quantity	The length of the parking zone
PARKINGZONE_Location_quantity	The distance from the downstream stop line to the front of the parking zone.
PARKINGZONE_MeanDurationOfManeuvers_quantity	Mean duration of parking maneuver.
PAVEMENTMATERIAL_Condition_code	The condition of the pavement.
PAVEMENTMATERIAL_FrictionCoefficient_quantity	The friction coefficient is used in the computation of maximum speed on a curve.
PAVEMENTMATERIAL_LagToAccelerate_quantity	The time delay to accelerate.
PAVEMENTMATERIAL_LagToDecelerate_quantity	The time delay to decelerate.
PAVEMENTMATERIAL_Type_code	The code identifying the pavement type.

<b>Name</b>	<b>Definition</b>
PEDESTRIAN_ArrivalHeadway_quantity	The arrival headway for pedestirans actuating the push button.
PEDESTRIAN_ConstantDemandLength_quantity	The length of the pedestrian constant demand period.
PEDESTRIAN_ConstantDemandStart_quantity	The start time from the beginning of the simulation when pedestrian demand is continuous.
PEDESTRIAN_DeterministicStart_quantity	Elapsed time from start of simulation to beginning of deterministic arrivals.
PEDESTRIAN_Intensity_quantity	The number of pedestrians per hour.
PHASE_ConditionalService_code	This code specifies whether the phase can service a left turn twice in the same cycle.
PHASE_DualEntry_code	This code specifies whether dual entry is allowed.
PHASE_ForceOff_quantity	The point in the phase were the controller must terminate the phase to service another phase.
PHASE_GapReduction_code	The code identifying the method for reducing the gap between vehicles from the orginal value to a lesser value over a specified amount of time.
PHASE_GreenEnd_quantity	The end time for the green part of the phase.
PHASE_GreenStart_quantity	The start time for the green part of the phase.
PHASE_Lag_code	This code designates which phase of a phase pair displays green first.
PHASE_LagPhaseHold_code	This code designates whether a hold can be placed on a phase to prevent the phase from terminating before the force-off point.
PHASE_MaximumGap_quantity	The gap at the baginning of the reduction period.
PHASE_MaximumGreenLength_quantity	The maximum time that a phase is allowed to display green after receipt of a vehicle call on a conflicting phase.
PHASE_MaximumInitialInterval_quantity	The maximum green time allowed for the variable initial interval timing.
PHASE_MaximumVehicleRecall_code	This code specifies whether the controller will service maximum green when there is no demand.
PHASE_MinimumConditionalServiceTime_quantity	The minimum time that must be available to provide the conditional service phase when a call is issued for the phase.
PHASE_MinimumGap_quantity	The minimum acceptable vehicle gap.
PHASE_MinimumGreenLength_quantity	The shortest green time of the phase. If a time setting control is designated as minimum green, the green time shall not be less than that setting. For a fully-actuated controller, the first timed portion of the green interval. It is set considering the number of waiting vehicles between the approach detector and stopline.
PHASE_MinimumInitialInterval_quantity	Once an actuated phase is initiated, it must be in effect for some minimum initial interval regardless of competing CALLs for other phases. At the end of the minimum initial interval, the phase may be terminated if no detector actuations are registered for the current phase and a CALL is received for a subsequent phase. Otherwise, the current phase is extended until its Force-off Point is reached.
PHASE_MinimumVehicleRecall_code	This code specifies whether the minimum initial interval is recalled when there is no demand.
PHASE_Number_number	The phase number
PHASE_Overlap_code	This code designates whether this phase is one of phase pair defining an overlap.
PHASE_PermissiveEndTime_quantity	During a permissive period, calls may be answered for phases other than the sync phases. Each permissive period has a Begin and End time.

Name	Definition
PHASE_PermissiveStartTime_quantity	During a permissive period, calls may be answered for phases other than the sync phases. Each permissive period has a Begin and End time.
PHASE_RedEnd_quantity	The end time for the red part of the phase.
PHASE_RedLock_code	When red lock is active the controller begins accumulating vehicle actuation for the phase to be used in the calculation of variable initial timing during only the red portion of the phase.
PHASE_RedRevertTime_quantity	The minimum time that red must be displayed after a yellow.
PHASE_RedStart_quantity	The start time of the red part of the phase.
PHASE_ReductionTime_quantity	The time over which the initial extension (gap) time will be reduced to a lesser value.
PHASE_RestInRed_code	This code designates if the controller is allowed to rest in red when there is no demand.
PHASE_RightTurnOnRed_code	Whether a vehicle desiring to turn right at an intersection may do so or not when the light is red. See PHASE_RightTurnControlType_code in TMDD.
PHASE_SimultaneousGapOut_code	This code specifies whether both rings in a dual ring controller must cross the barrier at the same time.
PHASE_TimeBeforeReduction_quantity	The time from the beginning of the approach phase green until the extension (gap) time starts to be reduced (gap reduction) to some lesser value.
PHASE_TotalLength_quantity	The total length of the phase.
PHASE_VehicleExtensionTime_quantity	The time needed for a vehicle to traverse the distance from the detector to the stop line.
PHASE_WalkClearanceLength_quantity	The time it takes for a pedestrian to travel the distance from curb line to curb line.
PHASE_WalkLength_quantity	A traffic phase allocated to pedestrian traffic which may provide a right-of-way indication either concurrently with one or more vehicular phases, or to the exclusion of all vehicular phases.
PHASE_YellowEnd_quantity	The end time for the yellow part of the phase.
PHASE_YellowLock_code	If this memory lock toggle is "on" vehicle actuation which occur during the yellow and red display of the signal phase are accumulated and remembered in the controller and used in the variable initial calculation and/or to call the phase for service.
PHASE_YellowStart_quantity	The start time of the yellow part of the phase.
RCTRL_InitializationPretimedSignalTransistion_code	Timing plan transition codes.
RCTRL_InitializationRandomSeed_quantity	Random number seed
RCTRL_Initialization_time	Maximum initialization time prior to simulation.
RCTRL_TimeIntervalDuration_time	Duration of the time interval.
RCTRL_TimeIntervalID_number	Time Interval Number
RCTRL_TimePeriodDuration_time	Duration of the time period.
RCTRL_TimePeriodID_number	Time Period Number
SCENARIO_AgencyName_text	The name of the agency creating this scenario.
SCENARIO_CreationDate_date	The scenario creation date.
SCENARIO_SimulationID_number	The ID number of the simulation.
SCENARIO_UserName_text	The name of the user creating this scenario.
SIGNALINTERVAL_ControlCode_code	The control code for a signal interval for an approach to an intersection.
SIGNALINTERVAL_Duration_quantity	The duration of a fixed time controller signal interval
TIMINGPLAN_ConditionalService_code	This code determines is a left turn phase can be serviced twice during the controllers background cycle length if the time remaining in the cycle is greater than a user specified time.

Name	Definition
TIMINGPLAN_CoordinationLength_quantity	The time during phase 2 green before T0 that is allowed for system coordination.
TIMINGPLAN_DualEntryOperation_code	In dual ring operation, this code indicates if in the absence of a call on a compatible phase in the opposite ring if the partner phase will also display green.
TIMINGPLAN_LastCarPassage_code	This code determines that if gap reduction has been initiated and the phase gaps-out, the last vehicle crossing the detector before the gap-out will receive the initial or full extension time.
TIMINGPLAN_LocalCycleLength_quantity	The length of one timing cycle for a controller.
TIMINGPLAN_LocalT0_quantity	The time of T0 in system time.
TIMINGPLAN_MinimumGap_quantity	The minimum acceptable gap allowed.
TIMINGPLAN_Node_number	The node/intersection identifier for the timing plan.
TIMINGPLAN_Offset_quantity	The time relationship expressed in seconds or percent of cycle length, determined by the difference between a defined interval portion of the coordinated phase green and a system reference point.
TIMINGPLAN_SimultaneousGapOut_code	In dual ring operation, this code determines if the controller will service another phase if both active phases are not in gap-out or max-out mode.
TIMINGPLAN_SystemCycleLength_quantity	The background cycle length. The time from the beginning of main street green through all the phases back to the beginning of main street green.
TIMINGPLAN_Transition_code	The timing plan transition type for a fixed time controller.
TIMINGPLAN_YieldInterval_quantity	This is the only period of time during the cycle when phase 1 may be terminated.
TIMINGPLAN_YieldPoint_quantity	The Yield Point begins a period of time known as the Yield Interval. This is the only period of time during the cycle when phase 1 may be terminated.
TRAFFICASSIGNMENT_AcceptableThreshold_quantity	The assignment process terminates when the maximum number of iterations is reached, or when the relative change of the objective function between two successive iterations is less or equal to the threshold value (Epsilon), whichever occurs first.
TRAFFICASSIGNMENT_AccuracyThreshold_quantity	The line-search accuracy threshold.
TRAFFICASSIGNMENT_AllOrNothingPercentage_quantity	Percentage of the impedances produced by an all-or-nothing network loading that will be incorporated in the first assignment iteration.
TRAFFICASSIGNMENT_CapacityIterations_number	Number of capacity iterations to be applied.
TRAFFICASSIGNMENT_CapacitySmoothingPercentage_quantity	Capacity smoothing factor to be applied if more than one capacity adjustment iteration is requested.
TRAFFICASSIGNMENT_DavidsonRatio_quantity	Ratio of the service discharge rate to the saturation rate.
TRAFFICASSIGNMENT_ID_number	This will uniquely identify a set of assignment parameters.
TRAFFICASSIGNMENT_ImpedanceFunction_code	This code identifies the impedance function used.
TRAFFICASSIGNMENT_MaximumIterations_number	The assignment process terminates when the maximum number of iterations is reached, or when the relative change of the objective function between two successive iterations is less or equal to the threshold value (Epsilon), whichever occurs first.
TRAFFICASSIGNMENT_OptimalityType_code	This code identifies which optimization to use.
TRAFFICASSIGNMENT_ParameterA_quantity	This item assumes the CORSIM assignment function. The first parameter for the impedance function.
TRAFFICASSIGNMENT_ParameterB_quantity	This item assumes the CORSIM assignment function. The second parameter for the impedance function.

Name	Definition
TRANSIT_DwellTimePercentage_quantity	The factor by which the mean dwell time is multiplied to compute the actual dwell time that the transit unit spends servicing passenger at an individual stop.
TRANSITROUTE_DownstreamNode_number	The downstream node number.
TRANSITROUTE_ID_number	This number uniquely identifies the transit route.
TRANSITROUTE_MeanHeadway_quantity	The mean headway between transit vehicles on this route.
TRANSITROUTE_Offset_quantity	An offset time at which a transit vehicle is emitted onto the route.
TRANSITROUTE_StationID_number	The transit route station ID.
TRANSITROUTE_UpstreamNode_number	The upstream node number.
TRANSITSTATION_Distance_quantity	The distance from the downstream end of the transit stop to the downstream stop bar.
TRANSITSTATION_DownstreamNode_number	The nearest downstream node number.
TRANSITSTATION_ID_number	This number uniquely identifies the transit station.
TRANSITSTATION_MaximumTransitVehicles_number	The maximum number of transit vehicles the station can hold at one time.
TRANSITSTATION_MeanDwellTime_quantity	The mean dwell time for transit vehicles to load and unload passengers at this station.
TRANSITSTATION_Protected_code	This code indicates whether the transit stop is protected or not. For example, the stop may be a turnout and does not block traffic.
TRANSITSTATION_ServicePercentage_quantity	Percentage of transit vehicles servicing this station that do not stop due to lack of demand.
TRANSITSTATION_Type_code	This code identifies the transit station type.
TRANSITSTATION_UpstreamNode_number	The nearest upstream node number.
VEHICLE_Acceleration_quantity	The acceleration of a vehicle at a given instant.
VEHICLE_AccelerationMaximum_quantity	The maximum acceleration of a vehicle on a level road.
VEHICLE_DecelerationMaximum_quantity	The maximum deceleration allowed on level grade and dry pavement.
VEHICLE_Height_quantity	The height of a vehicle.
VEHICLE_Length_quantity	The length of a vehicle.
VEHICLE_LoadWeight_quantity	The weight of cargo and occupants carried by a vehicle.
VEHICLE_LoadWeightMaximumRecommended_quantity	The recommended maximum cargo weight for a vehicle.
VEHICLE_NonEmergencyMaximumDeceleration_quantity	The largest value of deceleration that is allowed for car following.
VEHICLE_Occupancy_quantity	The number of people, including the driver, inside a vehicle.
VEHICLE_OccupancyMaximum_quantity	The maximum number of people, including the driver, that should be carried in a particular vehicle.
EMISSION_VehiclePerformanceIndex_number	This is the Vehicle Performance Index specified in the Vehicle object.
VEHICLE_PowerMaximum_quantity	The maximum power produced by a vehicle's engine.
VEHICLE_ProjectedFrontalArea_quantity	The area of a vehicle's silhouette projected onto a vertical plane in front of the vehicle. (Influences drag characteristics.)
VEHICLE_Speed_quantity	The speed of a vehicle at a given instant.
VEHICLE_SpeedMaximum_quantity	The maximum speed of a vehicle on a level road.
VEHICLE_Type_code	This code identifies the vehicle type.

## Appendix

### *UML Object Diagrams and Terminology*

“Rational Software Corporation, where UML was developed, defines UML as a language for specifying, constructing, visualizing, and documenting the artifacts of a software-intensive system. The vocabulary of the language is a notation—a set of shapes in which each shape has a particular meaning. The grammar has carefully defined semantics that describe how each shape can be used. In combination, the notation and semantics make it possible to describe all kinds of systems, regardless of their scope and complexity. Rational Software Corporation compares UML to a blueprint for a construction project: it helps a team visualize a program's architecture throughout the development cycle.

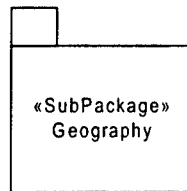
“UML is a derivative language, formed from parts of three earlier languages: Booch, OMT (Object Modeling Technique), and OOSE (Object-Oriented Software Engineering). Unofficially, UML has become widely accepted as a standard and the Object Management Group (OMG) is considering a proposal for the adoption of UML as the official standard modeling language.

Quotes from Visio 5.0 Help, Copyright (C) 1997 Visio Corporation.

The UML diagrams and terms used in this document are as follows:

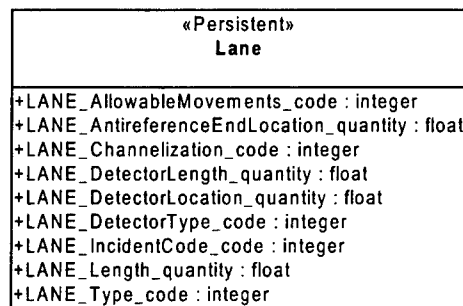
### Package

The package diagram is used to partition a system into separate components such as facilities, displays, vehicles, etc.



### Class

An object class describes a group of objects with similar properties (attributes), common behavior (operations), common relationships to other objects, and common semantics. For example, in this document “Lane” is an object class. While there are several types of lanes, left turn, right turn, through, etc., they all have similar properties, common behavior, relationships and semantics.



### Attributes

An attribute is a data value held by the objects in a class. In a traffic simulation each instance of a lane will have location and length. These characteristics are some of the attributes of a lane. The values can be unique for each instance of a lane but all lanes will have these values. In the class diagram above, nine attributes have been identified for the object class Lane. There, no doubt, are more but these are the attributes that have been identified as necessary to a generic traffic simulation.

## Relationships

In an object diagram classes are linked together by relationships. These links represent physical or conceptual connections. There are several types of relationships used in object diagrams. In this document, two types of relationships are shown, generalizations and associations.

### Generalization

The relationship between a class and one or more refined versions of it is called generalization. The refined class is called a subclass. For example the class Lane is the superclass and some of its subclasses are: HOV Lane, Bicycle Lane, Two Way Left Turn Lane. While each of these subclasses inherits the nine Lane attributes, they each may have attributes peculiar to their class. See the Lane Generalization Diagram. The arrow below is used to signify a generalization. The arrow head points to the superclass.

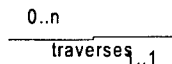


### Association

An association describes a group of links with common structure and common semantics. For example, an association between the classes Driver, Vehicle and Lane is that, a Driver drives a Vehicle and a Vehicle occupies a Lane. These may not be the only associations. They are, however, some of the associations of interest to traffic simulations.

### Multiplicity

Multiplicity specifies how many instances of one class may relate to a single instance of an associated class. For the classes Driver, Vehicle and Lane and the associations drives and occupies the multiplicities would be one Driver drives one Vehicle and many Vehicles occupy one Lane. The symbol below is used to signify an association and its multiplicity. A range is shown on each end of the line. Some of the possible ranges are: 1..1 (one and only one), 1..n (one or more), 0..1 (zero or one), etc.





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Additionally, the help files from the following software were also used.

CORSIM  
ITRAF  
TwoPas  
Synchro32  
Highway Capacity Software (HCS-3)  
TSIS  
SimTraffic  
Signal97/TEAPAC  
Passer4

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